CLINICOMYCOLOGICAL CORRELATION AND ANTIFUNGAL SUSCEPTIBILITY PATTERN OF FUNGAL ISOLATES IN A TERTIARY CARE HOSPITAL

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DECLARATION BY THE CANDIDATE

I hereby declare that the thesis entitled **"CLINICOMYCOLOGICAL CORRELATION AND ANTIFUNGAL SUSCEPTIBILITY PATTERN OF FUNGAL ISOLATES IN A TERTIARY CARE HOSPITAL**" submitted towards partial fulfillment of the requirements for the award of **MD MICROBIOLOGY** degree to BFUHS is a compilation of original work carried out by me under the supervision of **Dr. Veenu Gupta**, Professor & Head, Department of Microbiology, **Dr. Rajesh Mahajan**, Professor, Department of Medicine and **Dr. Jyoti Chaudhary** Associate Professor Department of Microbiology. No part of this thesis has formed the basis for the award of any degree previously.

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LIST OF ABBREVIATIONS

- FI Fungal Infections
- IFI Invasive Fungal Infections
- CDC Center for Disease Control and Prevention
- IC Invasive Candidiasis
- ICU Intensive Care Unit
- MIC Minimum Inhibitory Concentration
- NAC Non-albicans Candida
- PCR Polymerase Chain Reaction
- HTN Hypertension
- DM Diabetes Mellitus
- BAL Bronchoalveolar Lavage
- ET Endotracheal
- GM Galactomannan
- IPA Invasive Pulmonary Aspergillosis
- LRT Lower Respiratory Tract
- LPD/AMB Lipoidal Amphotericin-b
- ROCM Rhino-orbital-cerebral Mucormycosis
- HAART Highly Active Anti Retroviral Therapy
- EORTC European Organisation for Research and Treatment of Cancer/Invasive fungal infections co-operative Group
- KOH Potassium hydroxide
- SDA Sabourad Dextrose Agar
- LCB Lactophenol cotton blue

ABSTRACT

INTRODUCTION-The fungal infections are increasing at high rate especially in immune-compromised patients and elderly population. The available therapeutic options are limited, so an early suspicion of the fungal infection with institution of appropriate antifungal therapy is important.

AIMS AND OBJECTIVES- 1.To Characterize Fungal Isolates.

2. To Study Clinico-Mycological Correlation of Fungal Infections In Admitted Patients.

MATERIAL AND METHODS-This prospective study was carried out in DMCH, Ludhiana. Total of 19698 samples obtained. Various samples were inoculated on SDA and blood and body fluids were processed by BACTEK/BacT Alert method. Fungal isolates obtained were characterised and antifungal susceptibility was done. For yeast isolates VITEK-AST panel and for molds by Sensititre Yeastone micro broth dilution method was used.

RESULTS-Out of total samples 372 isolates were obtained from 365 patients. Out of 372 isolates,149 candida isolates were colonizers obtained from respiratory and urine samples and 223 were labelled as pathogens. Total of 223 isolates were obtained from 216 patients. Male predominance was seen. (65.3%) as compared to females (34.7%). Majority of patients belong to 51-60 years (23.1%). Candidiasis followed by aspergillosis was most common infection. Most common fungal infection was Candidiasis (60.6%) followed by Aspergillosis (29.2%) and Mucormycosis (6.0%). In Candida albicans 100% susceptibility was seen to Fluconazole and Echinocandins and in NAC, to Amphotericin-B (89.2%) followed by Voriconazole (82.5%).

CONCLUSION-Antifungal resistance is major cause of morbidity and mortality. Prompt diagnosis and antifungal susceptibility will offer the early appropriate treatment and better clinical outcome of patient**.**

KEY WORDS-Fungal infections, Fungal Culture, Antifungal Susceptibility

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INTRODUCTION

Fungal infections (FI's) have recently emerged as a world-wide healthcare problem presenting the enormous challenge to the healthcare professionals. Unfortunately some of these "microbial threats" that have been underestimated and neglected by healthcare authorities[1]. FIs represent an example of such overlooked emerging diseases, accounting for approximately 1.7 million deaths annually [2].

The rising prevalence of these infections is related to several host factors, including elderly or critically ill patients, immunocompromised individuals secondary to malignancies, solid organ transplants, HIV and patients on immunosuppressants.Prolonged use of broad spectrum antibiotics in chronic patients may stimulate the growth and virulence of fungal infections by destruction of bacterial flora. It is associated with high morbidity and mortality rates as well as with devastating socioeconomic consequences[3].

The overall IFI incidence rate varies from 3% to 20%.Opportunistic pathogens such as *Candida spp*., *Cryptococcus spp., Aspergillus spp.,* and *Mucorales* are the most common causative agents and other*hyalohyphomycetes* such as Fusarium sp. and *Scedosporium sp.,phaeohyphomycetes*(darkly pigmented or dematiaceous fungi), and *basidiomycetous* yeasts (*Trichosporon spp., Malassezia spp.)* known to cause these infections in different populations[4]. These fungi affect various tissues throughout the body, with the respiratory system being the most common[5].Invasive candidiasis is considered the most common IFI; however, there are shifts in epidemiology noted towards non-albicans sp.[6,7]. In blood stream infections, a predominance of invasive candidiasis has been reported. In critically ill patients, coinfections are also observed that further complicates and delay the diagnosis[5,8].

However the available therapeutic options are limited, particularly for the pathogens that are resistant to >1 class of antifungals. So, an early suspicion of the fungal infection with institution of appropriate antifungal therapy is mandatory for the positive outcome and to prevent development of invasive fungal infection.

Candida spp., though colonize the mucosal surfaces in an asymptomatic manner but can become one of the significant causes of lethal infection[9]. The change from commensal to potent pathogen is facilitated by virulence factors like adherence to host tissues and medical devices, biofilm formation, and secretion of extracellular hydrolytic enzymes[10].

Among the *Candida* infections, Candidemia is a life threatening complication in patients. It is the most common fungal bloodstream infection in hospitalized patients.[11] The major risk factors include antibiotic therapy, urinary catheterization, surgical procedures, female sex and extended hospitalization. Also, multiple site colonization with Candida species is being recognized as a major risk factor for invasive fungal infections in critically ill patients.

Candida albicans and Non-albican candida(NAC) species like *Candida tropicalis, Candida glabrata*, *Candida parapsilosis* and *Candida krusei* are the most common species involved in candidiasis.

Although, *Candida albicans* is the most prevalent. In past years, a shift in *Candida* species towards NAC species has been observed[10]. Several NAC spp. are inherently resistant or acquire resistance to commonly used antifungal drugs. Though clinical manifestations of both NAC and *Candida albicans* are indistinguishable[12].

For invasive candidiasis, detection of the fungal cell wall product (1,3)-β-d-glucan (BDG) in the blood has emerged as important marker for initiation

of antifungal therapy in suspected or potential IC before microbiological confirmation.

Cryptococcus can cause pneumonia and can disseminate to central nervous system[20]. Most prevalent species are *Cryptococcus neoformans, Cryptococcus laurentii, Cryptococcus gattii*. In majority of cases with Cryptococcal infections, Cryptococcal meningitis was diagnosed. Although the absolute number of Cryptococcal deaths has decreased since 2008, the AIDS-related mortality in Cryptococcosis remains high. Approximately, 15% of Cryptococcal meningitis are the cause of AIDS-related deaths[13].

In pulmonary and critical care medicine, invasive aspergillosis are among the most common mold infections. *Aspergillus* is a ubiquitous mold capable of causing lung infection. It can cause disease from simple allergic forms to invasive aspergillosis, with a mortality rate even higher than 80% in invasive forms[14]. It is characterized by aspergilloma which is a “fungal ball” with a dense network of fungal hyphae localized in lung cavities formed by tuberculosis and other pulmonary diseases. The hyphae are narrower (2 to 5 micron diameter), exhibit regular dichotomous(45°) branching, and have many septations. Among the aspergillosis ,*Aspergillus flavus* and *Aspergillus fumigatus* are the most common species encountered.

Histopathology is the only means of establishing a definitive diagnosis of invasive pulmonary aspergillosis, but lung biopsy is often infeasible in the most susceptible hosts because of clinical instability or prohibitive bleeding risk.

In recent years, laboratory techniques for *Aspergillus* detection such as galactomannan (GM) and polymerase chain reaction (PCR) testing in both blood and bronchoalveolar lavage (BAL) have gained importance in the diagnosis of this infection.

Mucormycosis is a major threat these days. The spores of are ubiquitously present in the environment. The agents of mucormycosis are angioinvasive so infarction of infected tissues is a hallmark of this disease. It also disseminate to distinct body organs[15]. The most common underlying disease is diabetes mellitus followed by haematological malignancies and solid-organ transplants. Devastating rhino-orbital-cerebral and pulmonary infections are the most common infections caused by these fungi.

In India, with a vast burden of SARS-CoV-2 as of Aug 11, 2021 reported the highest number of cases of mucormycosis, especially during the second wave of COVID-19[16]. According to reports from the Union Health Ministry, India reported 40,845 cases of mucormycosis as of June 28, 2021[17]. In view of this, government of India declared “mucormycosis”, a notifiable disease under the Epidemic Diseases Act, 1897.[18]

Mucormycosis cases were even higher in India even before the pandemic with high diabetic population[19]. Sudden rise was seen due to hyperglycemic condition and the drugs used during its therapy, especially steroids, hypoxic conditions in affected patients, severe acidosis, raised ferritin levels and other factors supporting the immunosuppressed condition of the host[20].

The hyphae of the *Mucorales* are distinct, broad (5 to 15 micron diameter), irregularly branched, and have rare septations. The genera most commonly found are *Rhizopus*, *Mucor*, and *Rhizomucor*; *Cunninghamella*, *Absidia* (now reclassified as *Lichtheimia*), *Saksenaea*, and *Apophysomyces* are less commonly encountered.[21]

Serum tests like 1,3-beta-D-glucan assay and the galactomannan assay, are being used in invasive fungal infections. The agents of mucormycosis do not share these cell wall components and positivity is not seen in mucormycosis patients.

Histoplasma capsulatum and *Fusarium* are the re-emerging infections which are not as frequently diagnosed as Candida, *Aspergillus* and the *Mucorales* but the rate of infection is increasing[22]Also, there is one emerging fungal infection that was previously unknown a decade ago *C. auris ,* was first described in 2009 after isolation from external ear discharge from a patient in Japan.[23] Since then, it has been identified as a pathogen causing primarily bloodstream infections that is candidemia but also, wound, urinary tract.*Candida auris* is a multi drugresistant pathogen, can colonize skin and persist in the healthcare environment and associated with outbreaks in healthcare settings.[24]

Recently, emergence of resistance to antifungals is a major concern. Microbiological resistance refers to non-susceptibility of a fungus to an antifungal agent by in vitro susceptibility testing, in which the MIC(minimum inhibitory concentration) of the drug exceeds the susceptibility breakpoint for that organism. Microbiological resistance can be primary (intrinsic) or secondary (acquired). Intrinsic resistance was seen in *Candida krusei* to fluconazole and of *Cryptococcus neoformans* to echinocandins. The acquired resistance to fluconazole seen in *Candida albicans* and *Cryptococcus neoformans* strains.[25,26]

Azoles are the first choice for most clinical forms. Resistance to the azole group of antifungal agents is of major concern because azoles like fluconazole are the most commonly used antifungals.[10] As it is safe and effective in all clinical types of candidiasis.[27].Acquired resistance to azoles seen in aspergillosis due to sustained exposure of fungi to azolic compounds.[28]

Amphotericin B is widely used in various formulations for the treatment of disseminated candidiasis and candidemia. It has rapid cidal action against most of strains of candida species. It is first line drug in mucormycosis[38] and has good susceptibility against *Aspergillus species.*

Echinocandins include caspofungin, anidulafungin and micafungin. These are having broad spectrum antifungal activity. Susceptibility to echinocandins was comparatively high in various studies [29,30] as these are still the least used drugs in India.

The burden of antifungal resistance is becoming a major concern in high risk population. A better understanding of the mechanisms and clinical impact of antifungal resistance is essential to the early and effective treatment of patients to improve the outcome. Though recent guidelines are there to standardize antifungal susceptibility testing, but there still limitations due to incomplete correlation between in vitro susceptibility and clinical response to treatment.

With this aim the prospective study was undertaken to know the incidence, types of fungal infections, to study the antifungal susceptibility and to correlate it with the clinical outcomes in admitted patients.

AIMS OF THE STUDY

1. To Characterize Fungal Isolates.
2. To Study Clinico-Mycological Correlation of Fungal Isolates In A Tertiary Care Hospital.

REVIEW OF LITERATURE

The incidence of fungal infections has risen substantially over the past several decades.Geoffrey[31] in a study observed that fungi are amongst the oldest recognized cause of infection in human. Fungal infections are neglected in the history but incidence is rising nowadays due to extensive and inappropriate use of antimicrobial agents as well as use of immuno-suppressant drugs in various diseases has contributed to the increased propensity.hospitalization of patientsespecially in an intensive care unit (ICU). Fungal infections increases mortality rates in the range of 18-50%.[32]

Fungi like Candida, Cryptococcus,Aspergillus, and *Pneumocystis* affect mainly immunocompromised individuals, however endemic dimorphic fungi such as *Histoplasma, Blastomyces, Coccidioides* and *Paracoccidioides* affect immunocompetent patients as well, and endemic areas.[33,34]

High risk population for fungal infections, belong to patients on immunosuppressive drugs and chemotherapy, on steroid therapy, the elderly, Diabetics, HIV-infected patients, premature infants and patients undergoing major surgery.

Multiple studies conducted worldwide reported association of different underlying disease/predisposing factors with clinical forms of mucormycosis.[21,35] A study conducted by Kaushik R[36] reported cutaneous mucormycosis cases from India and observed that major risk factor was trauma(59%) of the cases, followed by diabetes mellitus(28%) and malignancy(6%).

Fungal infections can be local or systemic.Local infections involve skin or mucous membranes whereas systemic infections are often blood stream. Systemic infections are the major cause of morbidity and mortality. Early diagnosis is a key factor in patient overcome.[37]

The clinical manifestations of the fungal infections vary from colonization to invasive broncho-pulmonary disease to disseminated fungal disease.

Most of fungal infections are opportunistic also due to presence of spores in environment, even in hospital environment. Different areas of hospital depicts different incidence of fungal infections. Hospitalization of patients especially in an intensive care unit (ICU) is a risk factor for fungal infections.

A prospective study conducted by Goulart LS *et al.* in a pool of confirmed HIV-positive individuals at a specialty outpatient service in Rondonópolis, Mato Grosso, Brazil. Oral swabs collected from 197 patient, out of which total of 101 (51.3%) patients were *Candida spp* carriers. *Candida albicans* was the most prevalent species (80%). Among them 45 to 59 years and 60 years or older were at higher risk of oral colonization by *Candida species.* Resistance to fluconazole and ketoconazole, or to itraconazole, corresponded to 1% and 4%, respectively.[38]

A study conducted by EunJin Kim *et al,* no significant shift was observed towards non-*albicans candida spp.* and *C. albicans* remained the dominant cause of candidemia.[39] Whereas some studies showsNAC species dominated over *Candida albicans* 61 (85.91%) vs. 10 (14.08%) with *C. tropicalis* (35.21%) being the most common species followed by *C. glabrata* (21.13%). *C. albicans* (14.08%) was the third most common species isolated. 9.86% of isolates were identified as *C. krusei* and *C. pelliculosa* while 4.23% isolates were of *C. parapsilosis* and *C. gulliermondii.* Only 1 isolate was identified as *C. utilis*.[40]

A study conducted by Ahmet CY et al.[50]showed isolation of 124*candida species*from ICU patients (51.25%), 53 pediatric ICU patients (22.08%), 30 patients (12.5%) from the hematology unit, 23 patients (9.58%) internal medicine unit, and 11 patients (4.58%)surgical units.*Candidaparapsilosis*was more common isolate in pediatric ICU and Candida albicans adult ICU, hematology and surgical clinics, and *C. parapsilosis* was more common in internal medicine units.[41]

Prakash *et al.*[42] reported in various case series from India, ROCM mucormycosis is the commonest form (45–74%), followed by cutaneous (10–31%), pulmonary (3–22%), renal (0.5–9%), gastrointestinal (2–8%), and disseminated infections (0.5–9%). Pulmonary mucormycosis is commonly associated with SOT recipients (37–44%), haematological malignancy (10–26%), and diabetes mellitus (10–14%) in Indian patients.

A global study conducted by Jeong W *et al.*[43] on cutaneous mucormycosis reported that 43–67% of patients were immunocompetent hosts followed by diabetes mellitus (10–15%), malignancy (12–23%), and solid organ transplant (5–16%). Among the predisposing factors, corticosteroid use was the most common factor(33%), followed by neutropenia (20%) and major/minor trauma (20%).

Skiada, A *et al.*[44] showed association of trauma with cutaneous mucormycosis, Other study[19] observed gastrointestinal (GI) mucormycosis the most difficult disease to diagnose associated with low birth weight infants, malnutrition or undergoing peritoneal dialysis patients.

In a study by Chakrabarti Aet al.[45] reported Rhizopus oryzae (69%)the most common isolate followed by *Apophysomyces elegans* (19%). Overall mortality was 45% and poor outcome was observed when surgical debridement could not be performed or the patients were treated only with amphotericin B deoxycholate.

Coinfection between SARS-CoV-2 and invasive pulmonary aspergillosis in patients with COVID-19 reported in several studies.[46,47,48]
The earliest symptoms or signs in invasive pulmonary aspergillosis (IPA) are fever unresponsive to atleast 3 days of broad-spectrum antibiotics, pleuritic chest pain, dyspnea, hemoptysis.

In a study by Lai CC *et al*.[46], among 29 patients who had culture-confirmed aspergillosis, *Aspergillus fumigatus* was the most common pathogens (89.7%,) observed followed by *Aspergillus flavus* (6.9%).

A retrospective study done by Kurosaki *et al*[49] investigated the clinical features of patients of pulmonary aspergillosis with interstitial pneumonia. Among them, 15 suffered from pulmonary aspergillosis. Emphysema and history of oral corticosteroids were the most common underlying conditions. All patients were given antifungal therapy. Among them,10 patients (66.6%) died. Pulmonary aspergillosis was associated with poor outcome in these patients.

The earliest symptoms or signs in invasive pulmonary aspergillosis (IPA) are fever unresponsive to atleast 3 days of broad-spectrum antibiotics, pleuritic chest pain, dyspnea, hemoptysis[50]

In a recent study done in Critical Care by Schroeder *et al* [51] to diagnose IPA in critically ill patients in patients with both positive (n=43) and negative (n=42) LRT cultures for *Aspergillus spp.* observed that the the median Galactomannan titre in BAL fluid was significantly higher in patients with positive *Aspergillus* cultures than others.

Cryptococcus neoformans is a 4-6 microns round-to-oval encapsulated yeast with a surrounding polysaccharide capsule ranging from 1 to >30 microns in size.

C. neoformans is distributed worldwide. In HIV-seropositive patients as a subacute meningo-encephalitis with CD4 cell counts < 100 cells/µl, with malaise, headache, fever and, later, visual disturbance and altered mental status is seen. Signs usually observed are meningism, papilloedema, cranial nerve palsies [particularly sixth nerve palsies reflective of raised pressure in cerebrospinal fluid (CSF)] and reduced conscious level.

In a case study by Bramantono B *et al.*[52] of a 43-year-old man newly diagnosed with HIV and *Cryptococcus neoformans.* It was observed mortality in HIV-infected patients with cryptococcus is high.

The diagnosis is made by India ink staining of CSF. Those with negative result with India ink can be diagnosed by highly sensitive and specific cryptococcal antigen testing of CSFor serum. There is only mildly elevated or normal white cell counts (usually lymphocytes), elevated protein and low or normal glucose is seen in these patients.[53]

Fusariosis is one of the emerging infections caused by *Fusarium* spp.that affects plants, animals, and humans.[54] These species exhibit global distribution and species causing human infections includes *F. solani*, *F. oxysporum*, *F. fujikuroi*, *F. incarnatum-equiseti*, *F. clamydosporum*, *F. dimerum*, *F. sambucinum*, *F. concolor,* and *F. lateritium*.Among these, *F. solani* is the most common and virulent(40-60% of infections) followed by *F. oxysporum* (~20%), *F. fujikuroi* and *F. moniliforme* (~10%).[55,56]

The infections caused by Fusarium species can be superficial and locally invasive to disseminated, with majority infections being onychomycosis, skin infections, and keratitis.[56]Keratitis is the most common infection seen[57], trauma is the most important predisposing factor(40-60%).[58]Cutaneous lesions have also been observed in patients with hematological diseases. Due to limited studies regarding fusariosis

treatment standards are also limited. Amphotericin B, voriconazole, and posaconazole are treatment options for fusariosis.

DIAGNOSTIC METHODS

Common methods practised in diagnosis of fungal infections are direct microscopy, histopathology and culture of specimens.

Direct microscopy has found 3 uses during initial assessment as it helps in detection of fungi directly in clinical specimens, confirmation that a culture of an airborne fungi such as *Aspergillus* is the cause of the infection and is not a contaminant and to identify fungi based on morphological appearances. In many studies, such as Kenney P[59] and Anthony PP[60] limitations still exist because of overlapping morphological features of many fungi.

Cultures are gold standard to diagnose a fungal infection and can detect any etiological agent precisely. Blood culture may takes several days for the detection and final diagnosis is established[61] but for *Candida* species still is the gold standard method.

Serological tests like (1-3)-β-D-glucan (BDG) and Mannan are also used for diagnosis of fungal infection. (1-3)-β-D-glucan (BDG)[62] a cell wall polysaccharide is found in most fungi except that of the *Cryptococcus, Zygomycetes,* and *Blastomyces dermatitidis,* which have complete absence of glucan or produce it in quantity very less likely to be detected. It is recommended as a complementary tool for the diagnosis of IFI in high risk patients. Galactomannan is the one of the most widely studied antigen in patients of invasive aspergillus.

Molecular identification methods are one of the diagnostic methods that do not need live fungal cells, these work best when pure cultures can be obtained from clinical specimen sent in the lab.

TREATMENT AND SUSCEPTIBILITY PROFILE

Antifungal susceptibility tests have become essential tools to guide the treatment of fungal diseases, to know the local and global disease epidemiology, and to identify resistance to antifungals.[63] Micro-broth dilution method, Sensititre Yeastone, VITEK are the methods used these days.

As the determination of the minimum inhibitory concentration (MIC) provides an overview on *in vitro*-resistance, it can also be considered strong evidence for selecting an antifungal treatment.

Antifungal prophylaxis is used in patients with specific risk factors like organ transplant patients, malignancies and patients with neutropenia. High mortality and morbidity is seen with delayed therapy in patients. Flucanozole is most common antifungal used for prophylaxis but high resistance is seen.

Resistance to antifungal drugs is increasing in recent years. The resistance of *C.albicans, C.tropicalis*and*C.glabrata* to fluconazole is increased compared to other drugs, due to indiscriminate use of fluconazole for long periods.

Infectious Diseases Society of America(IDSA) also states that, more than 90 % of invasive candidiasis is caused by *C. albicans, C. glabrata, C. tropicalis, C. parapsilosis,* and *C. krusei,* and these have unique virulence potential, antifungal susceptibility and epidemiology[64]

Azole resistance in *Candida spp.* is of major concern as these are easy to administer and are less nephrotoxic.

Among yeasts, *Candida krusei* is multidrug resistant, with decreased susceptibility to Fluconazole, Amphotericin B and Flucytosine. *Candida glabrata* is less susceptible to Amphotericin B and Fluconazole[65]

In a study by Bhattacharjee P, out of 70 samples collected in a tertiary care centre in Kolkata, India, *Candida albicans* were isolated from 34 (48.57%) samples and 36 (51.43%) were non-albicans Candida (NAC). Among 34 *C. albicans*, antifungal susceptibility was done in 28 isolates. Out of which 100% susceptibility to fluconazole was seen. Resistance to amphotericin B, flucytosine, voriconazole and itraconazole was observed in, 44.12% , 52.94% , 8.82% and 17.65% of the cases, respectively. Out of 36 isolates of NAC, resistance to Amphoterecin b, fluconazole, 5 flucytosine, voriconazole and itraconazole was found in, 30.56%, 61.11% , 33.33% , 19.44% and 38.89% cases respectively.[66]

In a study conducted by Roohani AH *et al*.[67] in all *candida* isolates,the susceptibility pattern to antifungal agents were observed by disk diffusion method. Susceptibility was observed as 86.2% to fluconazole and clotrimazole, 93.1% to ketoconazole, 96.5% to amphotericin B and100% to each nystatin, itraconazole and caspofungin.

A study by Jishnu BT *et al*.[68], a total of 72 isolates obtained over a period of 22 months.*Aspergillus flavus* was the most predominant 46 (63.80%) followed by *Aspergillus niger*16(22.20%). *Aspergillus fumigatus*5(6.94%), *Aspergillus terreus* 4(5.55%) and *A. Tetrazonus*1(1.38%). All Aspergillus isolates tested exhibited MIC values within the range of 0.0078–2 µg/ml except for *A. terreus* (4 µg/ml), which is known to exhibit intrinsic resistance to amphotericin B.

Aspergillus flavus and *A. Fumigates* were traditionally highly susceptible to amphotericin B, but nowadays, Polyene resistance is increasingly encountered in *Aspergillus* species.[69]

A study by *Li Y et al*.[70], among the 390 *Aspergillus* isolates 76.7% isolates exhibited complete susceptibility to all the tested antifungals, and 23.3% of different *Aspergillus* species isolates showed resistance to one or two classes of antifungal agents with higher MIC of >2 mg/L. Among them, 91.2% were resistant to amphotericin B.Triazole resistance was low

(3.3%) and only 2.8% *A. fumigatus*isolates were resistant to at least one of the triazoles.

A number of studies observed that voriconazole and posaconazole may be an option to treat refractory invasive aspergillosis(IA) as a salvage therapy.[71,72] Isavuconazole, available in capsule and IV formulation is another azole that is preffered.[71]

Echinocandins inhibit the synthesis of β-1,3-D glucan, which is integral to the structure and function of the fungal cell wall. Echinocandins are highly effective against *Candida* and *Aspergillus species.* Theechinocandins were most potent antifungals.

The treatment of mucormycosis involves the surgical debridement of infected tissue, antifungal therapy, and managing the underlying disease. Amphotericin B (AmB) is the first-line drug of choice; subsequently, posaconazole and isavuconazole are prescribed.

A study by Raad II *et al*[73] on salvage antifungal therapy, the primary outcome was clinical improvement or resolution at 12 weeks and over 90% of patients had underlying hematologic malignancy. The primary outcome was met in 40% of patients in the posaconazole group, 8% in the LPD/AMB group, and 11% in the combination group. At 12 months, 40% of patients died in the posaconazole group compared to 65% in the LPD/AMB group and 68% in the combination group.

Fusarium spp. are intrinsically resistant to echinocandins, and some isolates exhibit resistance to azoles. So the drugs of choice are amphotericin B and voriconazole, and drug combinations to combat multi-drug resistance.

A study conducted by Parkash *et al*.[74] in India showed the mortality rate of mucormycosis in India is in the range of 28–52%.The mortality rate in different clinical forms of mucormycosis reported from India are ROCM (31–49%), pulmonary (61–77%), cutaneous (23–57%), gastrointestinal

(67–94%), and disseminated (62–79%).Other studies also observed poor outcome in patients of pulmonary aspergillosis.[49]

The increase in mortality and morbidity associated with fungal infections makes it important to study in detail regarding epidemiology, pathogenic fungal species their sensitivity pattern and their correlation with the clinical conditions of the patients.

MATERIAL AND METHOD

The data collected was entered in a semi-structured proforma which included patient's details:

- Name
- Age
- Gender
- MRD no.
- Lab.ID no.
- Date of admission
- Provisional clinical diagnosis
- Risk factors
- Treatment history
- Radiological evaluation
- Histopathological evaluation
- Microbiological evaluation (Galactomannan assay, (1-3)-β- D glucan assay, fungal smear/culture)
- Clinical outcome.

SAMPLE COLLECTION

Various Samples like blood, body fluids (ascitic fluid, pleural fluid, cerebrospinal fluid(CSF),respiratory samples (sputum, Bronchoalveolar lavage (BAL), endotracheal secretions, bronchial brushings), surgical drain fluid, pus, tissue , skin scrapings, corneal scapings ,biopsy etc were included in the study.

SPUTUM

Sputum was collected in a wide mouthed, sterile, leak-proof, screw capped container under all aseptic precautions.

Endotracheal (ET) secretions :ET secretion was collected using a 22-inch Romson's 12 FG suction catheter with a mucus extractor which was gently introduced through the endotracheal tube for a distance of approximately 25–26 cm. Gentle aspiration was then performed without instilling saline and the catheter was withdrawn from the endotracheal tube. About 2 ml of sterile 0.9% normal saline was injected into it with a syringe to flush the exudates into a sterile container for collection

BRONCHOALVEOLAR LAVAGE (BAL)

Bronchoalveolar Lavage (BAL): Sample was collected using flexible fiberoptic bronchoscope. About 30-50 ml of physiological saline was infused through fiberoptic bronchoscope into peripheral bronchiolar ramification. The saline was then aspirated and collected in a sterile, robust and leak proof container.

BLOOD- Under aseptic conditions, 5 ml of blood was withdrawn from the antecubital vein with a disposable syringe, and was inoculated directly into Bac T/Alert and BACTEC 9240 Blood culture bottles.

Site of venipuncture was selected and a tourniquet applied, 3-4 inches above the intended site, the area was cleansed vigorously with 70% isopropyl alcohol and was allowed to dry, the site was cleaned with Povidone/Tincture of iodine similarly in outward direction circularly for an area of 4-5 inches. Phlebotomy was performed using needle and syringe, tourniquet was released and needle withdrawn.[76] The septum of the blood culture bottle was cleaned, 5-10 ml blood was inoculated directly into Bac T/Alert and BACTEC 9240 blood culture bottles. The cultures were examined daily by an automated system for detection of positive

bottles. The positive bottles were sub-cultured on blood agar and McConkey agar and the growth obtained after 24 hours of incubation was further processed for identification.[77]

PUS

Pus and discharge from wounds (post-operative and others), burn wound, and abscesses were collected with the sterile cotton tipped swabs/syringes.

OTHERS

Catheter tip (central venous catheter tips, umbilical tips) and body fluids like cerebrospinal fluid, ascitic fluid, pleural fluid, etc were collected aseptically in a sterile container.

SAMPLE PROCESSING

The samples received in microbiology laboratory were processed as under.

I. Direct microscopic examination

Potassium hydroxide mount(KOH)[78]

Composition of KOH:- Potassium hydroxide 10 gm

Glycerol	10ml
Distilled water	80 ml

These ingredients were mixed properly and solution was stored at room temperature.

Slide KOH preparation

A drop of potassium hydroxide solution was placed on a clean microscopic slide. The sample was transferred to the drop of KOH and mixed gently with inoculating loop. A cover slip was placed over it.

Clearing was hastened by gently heating the preparation over the flame of Bunsen burner, taking care to prevent drying. It was then examined microscopically under low (10×) and high (40×) power objectives.

Tube KOH preparation

Tube KOH method was used for biopsy specimens which take longer time for dissolution. The tissue was put in 10-20% KOH and was kept in an incubator at 37°C for dissolution. It was then examined microscopically under low (10×) and high (40×) power objectives. Presumptive identification was made based on direct microscopic examination of material from clinical sample.

2. INDIA INK Preparation

Cerebrospinal fluid was centrifuged; a small quantity of the sediment was emulsified into a drop of India ink on a clean glass slide and overlaid with a coverslip. The mount was examined under a microscope.

3.Cryptococcal Antigen Test

It is a rapid immunochromatographic test for the semi-quantitative detection and titration of *Cryptococcus* species capsular antigens in CSF.

4. Gram's Stain

Gram staining of the samples was done when was indicated.

5. Fungal Culture[75]

Culture media used were:

a) **Sabouraud dextrose agar (SDA) with antibiotics and without cycloheximide**

Composition and preparation:

Peptone	10gm
Dextrose	40gm
Agar	20gm
Distilled	water
1000 ml	
Chloramphenicol	50 mg
Gentamicin	20 mg

All ingredients were dissolved by boiling; antibiotics were added into SDA while boiling but before autoclaving. Chloramphenicol/ gentamicin were dissolved in 10 ml of 95% alcohol and added to boiling medium. The medium was dispensed in tubes and autoclaved at 121°C for 15 minutes and final pH was adjusted to 5.6. The medium was allowed to cool in slanting position and stored in the refrigerator.

b) **Sabouraud dextrose agar (SDA) with antibiotics and cycloheximide** -All ingredients of SDA with antibiotics were mixed properly and following antibiotic was added while boiling but before autoclaving:

Cycloheximide 500mg/1000ml

Cycloheximide was dissolved in 10ml acetone, added to boiling medium and mixed properly. The medium was removed from heating and mixed well. It was dispensed in tubes and autoclaved at 121°C for 15 minutes and final pH was adjusted to 5.6. The medium was dispensed in tubes and allowed to cool in slanting position and stored in the refrigerator.

Processing of sample for fungal culture

The samples were inoculated on two tubes of Sabouraud dextrose agar (SDA) with antibiotics (chloramphenicol 50mg/1L and gentamicin 20mg/1L) and cycloheximide (500mg/1L) and two tubes of SDA with antibiotics but without cycloheximide. One set of tubes was incubated at 25°C. Similarly, other set were incubated at 37°C. The inoculated media were kept for a minimum period of three weeks. Tubes were examined daily during 1^{st}week and on alternate days in $2^{nd}$and 3^{rd}week. The growth obtained was identified on the basis of colony morphology, pigment production and microscopic examination of lactophenol cotton blue (LCB) preparation.

•**Lactophenol cotton blue mount** [75]

Composition and preparation

Phenol crystals	20 ml
Lactic acid	20 ml
Glycerol	40ml
Distilled water	20ml
Cotton blue	0.05gm

All reagents were mixed properly and cotton blue stain was dissolved in distilled water before mixing with remaining reagents.

Lactophenol cotton blue preparation (LCB)

A drop of LCB was placed on a glass slide. A piece of clear vinyl adhesive tape 6-7 cm held with forceps and introduced into the culture tube. The centre of the tape was allowed to touch the colony lightly under its own weight. The tape was transferred to the slide, placing the area with adhered mycelium on to the lactophenol blue and under microscope.

Tease mount preparation

Growth on culture tubes was teased out on a glass slide in a drop of LCB stain using two teasing needles. Cover slip was placed over it and examined under microscope to study morphological features of fungal isolates.

b. Blood and body fluid culture

Blood and body fluid culture were done by BAC-T alert and BACTEC automated systems. The blood culture bottles were incubated till the bottle indicate positive by the system for maximum period of 7 days. The Bac-T alert microbial detection utilizes a colorimetric sensor (colour changes from green to yellow), while the BACTEC uses flourescent light to monitor the presence and production of CO2 by the micro-organisms.

Processing of the positive bottles

Smears were prepared from the positive culture bottles and Gram staining of the smears was done for Identification of fungus.

Criteria for Diagnosis of Fungal Infections

All the fungal isolates except candida from respiratory and urine samples were considered as true infection.[79]

Criteria for diagnosis of fungal colonization

Isolation of candida species from respiratory samples (sputum, endotracheal aspirate, brocho-alveolar lavage, suction tip) and urine were considered as fungal colonization.

Identification

1.Organism was identified by studying the colony characteristics, germ tube test and speciation was done by using VITEK-2 YST panel.

2.Colony characteristics- white or yellow white colonies with a smooth or pasty consistency.

3.Germ tube test (GTT)

Procedure

- A small colony of the yeast to be tested was suspended in a tube containing 0.5ml of the human/rabbit plasma or serum.
- The test tube was incubated at 37°C for 2 hours.
- A drop of yeast serum suspension was placed on a slide overlaid with a coverslip and examined microscopically for the presence of germ tube.
- The test is not valid after 2 hours.
  Interpretation- Germ tube is a filamentous extension from yeast cells that is about half the width and three to four times the length. It is produced by Candida albicans[80]

Antifungal susceptibility

For yeast isolates

Antifungal susceptibility for yeasts (flucytosine, fluconazole, voriconazole, amphotericin-B, and caspofungin) was done by VITEK-2 Technology.

The VITEK-2 yeast susceptibility test is automated identification and susceptibility test through analysis of yeast growth.

It is based on micro-dilution minimum inhibitory concentration technique. The automated growth based detection uses attenuation of light measured by and optical scanner.

For aspergillus isolates

Antifungal susceptibility for *aspergillus* was carried out with Sensititre YEASTONE susceptibility system (Amphoterecin B, ketoconazole, Echinocandins, itraconazole, fluconazole, voriconazole, posaconazole, and caspofungin) will be included.

It is a colorimetric microdilution test. Each plate is dosed with antifungal agents at appropriate dilutions and a colorimetric indicator. Results are read manually by observing the lowest antifungal concentration showing inhibition of growth (as evidenced by no colour change).

Serological evaluation

1.Galactomannan assay

Galactomannan assay [81,82]

Principle: It is a one-stage immune-enzymatic sandwich microplate assay which detects galactomannan in human serum. The assay uses rat EBA-2 monoclonal antibodies, which are directed against *Aspergillus* galactomannan.

Semi-quantitative determination of Aspergillus GM antigen in serum was done using Platelia *Aspergillus* EIA (enzyme immunoassay) kit (Bio-Rad, France)as per manufacturer's instructions.
Interpretation:

¬ Sera with an index < 0.50 were considered as negative for galactomannan antigen.

¬ Sera with an index ≥ 0.50 were considered as positive for galactomannan antigen.

Variables such as Mold active antifungal drugs (amphotericin B, voriconazole, itraconazole), piperacillin-tazobactam, amoxicillin- clavulanic acid, steroids, neutropenia were studied.

2. (1-3)-β-D Glucan Assay[81,82]

The Fungitell kinetic assay is based upon the determination of the rate of optical density increase produced by a sample. The Fungitell test results are expressed in picogram/ml.

Interpretation

Negative result: <60pg/mL

Indeterminate result: 60 to 79 pg/mL

Positive result: ≥ 80 pg/mL

Radiological findings

Chest X-Ray and High Resolution Computerized Tomography (HRCT), X-Ray PNS was done for Invasive aspergillosis, ABPA and Aspergilloma. Clinical and mycological findings were correlated in our study.

Invasive aspergillosis cases will be classified according to revised definitions given by Invasive Fungal Infections Co-operative Group (IFICG) of the European Organization for Research and Treatment of Cancer and Mycoses study group case definitions (EORTC/MSG) into proven, probable and possible invasive aspergillosis based on host, clinical and mycological factors[83]

Host criteria

–Diabetes
– Post stem cell transplantation
– Prolonged corticosteroid use
– Received immuno-suppressants
– Inherited immunodeficiency

Clinical criteria Presence of 1 of the following three signs of radiology – Dense, well-circumscribed lesion with or without a halo sign
–Air-crescentsign
–Cavity

Mycological criteria

-Positive indirect tests by galactomannan antigen detection
-Positive direct test by smear/culture Criteria

Classification of Invasive Aspergillosis according to EORTC criteria.

Proven IA	Histopathological evidence of tissue invasion by filamentous fungi, Isolation of Aspergillus species from a normally sterile but clinically infected body site
Probable IA	One microbiological criteria, and One host criteria, and Clinical criteria
Possible IA	Host criteria, and Presence of microbiological criteria, or Clinical criteria

OBSERVATION AND RESULTS

This prospective study was conducted in the Department of Microbiology, Dayanand Medical College and Hospital, Ludhiana. Total of 372 fungal isolates obtained from 19698 samples received in the laboratory in one year. Total of 372 isolates were obtained from 365 patients.

Among 365 patients, 149 (40.8%) patients showed fungal colonization and true infection was seen in 216 (59.2%). Detailed study was done for the patients with fungal infections (216). Higher prevalence was observed in medical wards (59.3%) as compared to ICU's (22.7%). Corticosteroid use 46 (21.3%) was the major risk factor observed. Candidiasis(60.6%) was the most common infection observed followed by Aspergillosis (29.2%) and Mucormycosis (6.0%). Among the *Candida albicans*, 100% susceptibility was seen to fluconazole, micafungin and caspofungin. In NAC, maximum susceptibility was seen to amphotericin-b (89.2%). Outcome was depicted in terms of discharged (94.4%) and expired (5.6%).

All the results are depicted in the tables and graphs that follow.

Table 1-Distribution of samples. (n=19698)

Samples	n (%)
Blood	15380(78.1)
Body fluids	3653(18.6)
Respiratory (ET/BAL/sputum/suction-tip)	483(2.4)
Sino-nasal mucosa	67(0.3)
Tissue	58(0.2)
Pus	30(0.2)
Urine	11(0.1)
Others	16(0.1)
Total	19698(100)

Maximum no. of samples received were blood samples (78.1%) followed by body fluids (18.6%) and respiratory samples (2.4%).

Figure 1- Distribution of samples (n=19698)

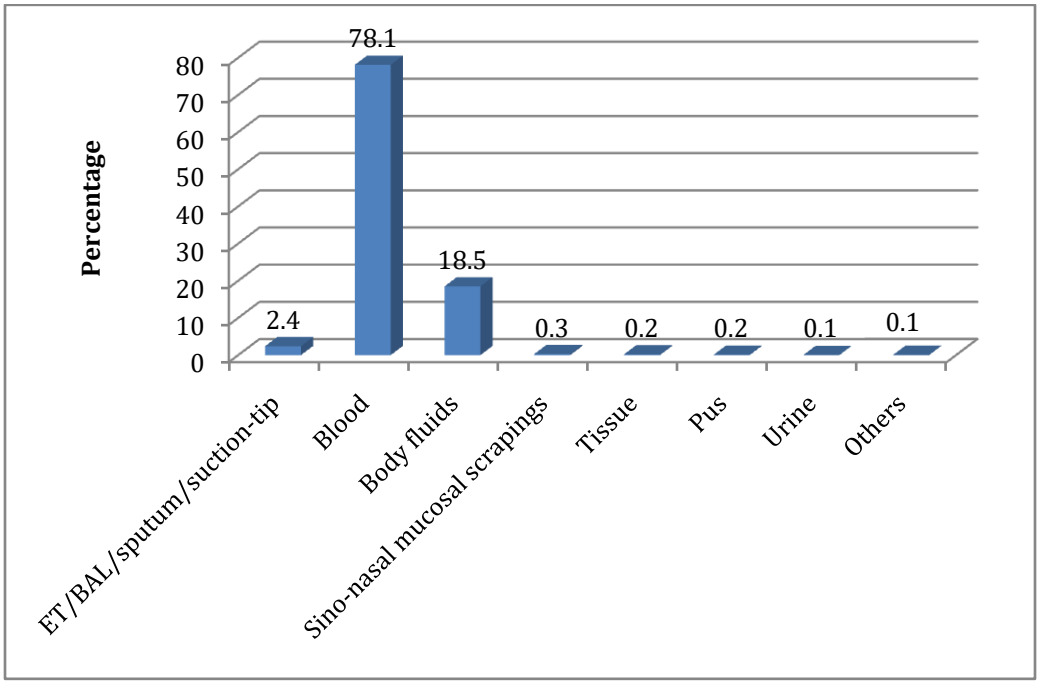


Table 2- Sample wise distribution of isolates (n=372)

Sample	*Candida*	*Cryptococcus*	*Trichosporon*	*Aspergillus*	*Mucor*	*Rhizopus*	*Fusarium*	Total
Blood	96	_	1	_	_	_	_	97
Respiratory samples	148	1	1	46	1	1	_	198
Body fluids	37	4	_	1	_	_	_	42
Tissue	2	_	_	4	1	1	1	9
Sino-nasal mucosa	_	_	_	11	3	5	_	19
Pus	1	_	_	_	_	1	_	2
Urine	1							1
Others	1	_	_	2	1	_	_	4
	286	5	2	64	6	8	1	372

Out of 19698, 372(1.88%) isolates were obtained. Out of 372 isolates, 149 *Candida* isolates obtained from respiratory (sputum, endotracheal tube, bronchoalveolar lavage, suction tip) and urine samples, these isolates were considered as colonizers and 223 were labelled as pathogens

.

Table 3- Distribution of isolates as single-site and multi-site infection.(n=223)

Samples	Single site	Multi-site	Total no.of isolates
Blood and body fluids (126)	120	6*2	132
Respiratory samples*(53)	53	_	54
Sino-nasal mucosal scrapings (19)	19	_	19
Tissue (9)	9	_	9
Drain fluid (3)	3	_	3
Pus (2)	2	_	2
Others (4)	4	_	4
			223

Out of 223 isolates, 210 were from single site and 12 from multi-site

*And in 1 respiratory sample, 2 isolates were obtained.

These 223 isolates were obtained from 216 patients.

Table 4- Distribution of samples among the multi-site infections (n=6)

Sample
Blood+ascitic fluid
Blood +bile
Pleural fluid+ PCD(Abdominal)
Blood + Peritoneal fluid
Peritoneal fluid + PCD(Chest)
Pleural fluid+ PCD(Abdominal)

Figure 2- Distribution of samples among the multi-site infections (n=6)

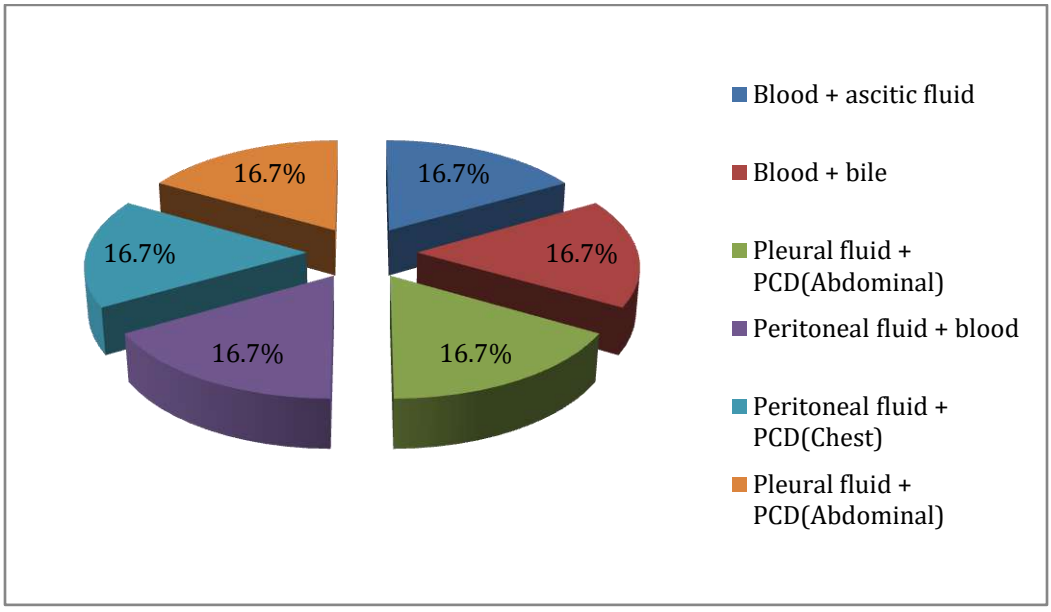


Table 5- Categorization of fungal infections (n=365)

Fungal infections	n (%)
True infection	216(59.2)
Fungal colonization	149(40.8)
Total	365(100)

Among 365 patients, 216 (59.2%)were with true infections and fungal colonization was seen in 149 (40.8%)patients. Detailed study was done for the patients having fungal infections (216).

Figure 3- Categorization of fungal infections (n=365)

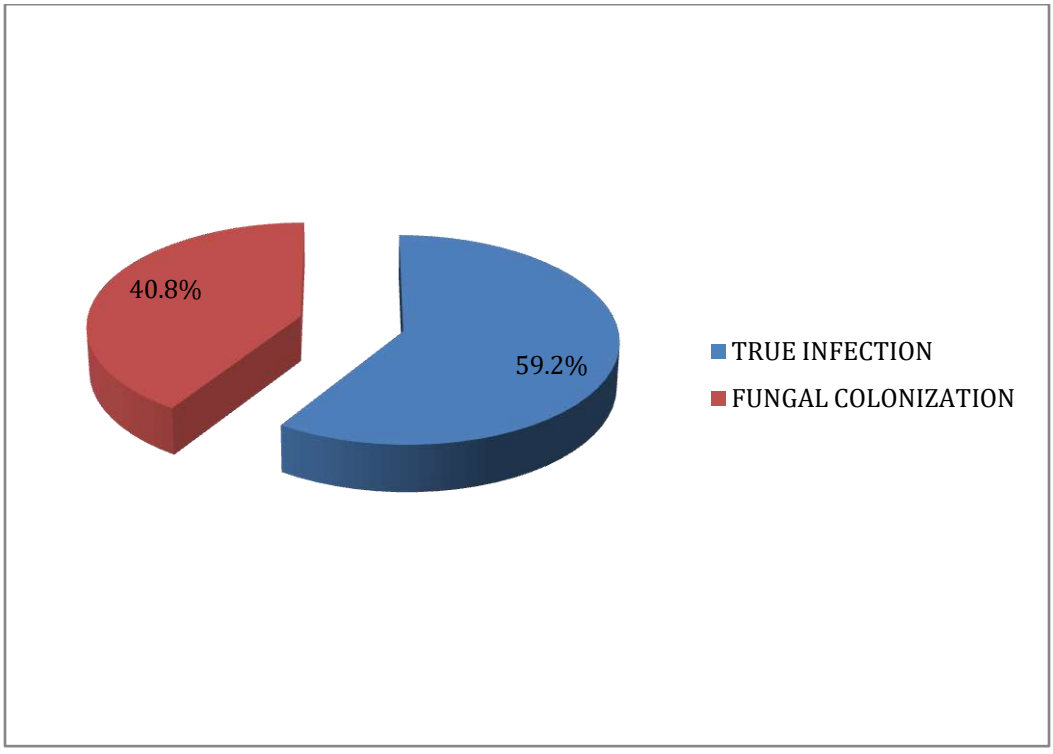


Table 6 - Sample wise distribution of colonizers (n=149)

Sample	n(%)
Sputum	108(72.5)
Endotracheal tube	28(18.8)
Broncho-alveolar Lavage	7(4.7)
Suction tip	5(3.4)
Urine	1(0.6)

Among the 149 isolates, maximum no. of colonizers were obtained from sputum samples (72.5%) followed by endotracheal tube (18.8%) and broncho-alveolar lavage (4.7%).

Figure 4- Sample wise distribution of colonizers (n=149)

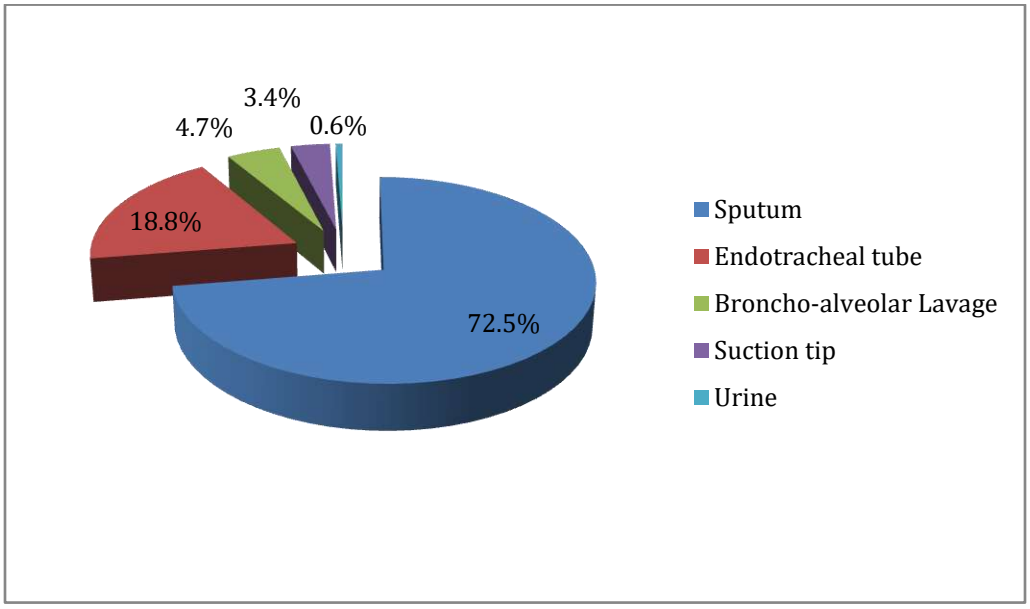


Table 7- Distribution of candida species among fungal colonization cases. (n=149)

***Candida*species**	**n (%)**
C.albicans	**14(9.4)**
Non-albicans candida(NAC)	**135(90.6)**
C.tropicalis	74(49.7)
C.stellatoidea	56(37.6)
C.cifferi	2(1.3)
C.gulliermondii	2(1.3)
C.pseudotropicalis	1(0.7)

Among the 149 colonizers, 9.4% were *Candida albicans* and 90.6 % were NAC.

Among the 145 NAC, most common species obtained was *Candida tropicalis* (49.7%) followed by *Candidastellatoidea* (37.6%)

Figure 5-Distribution of candida species among fungal colonization cases. (n=149)

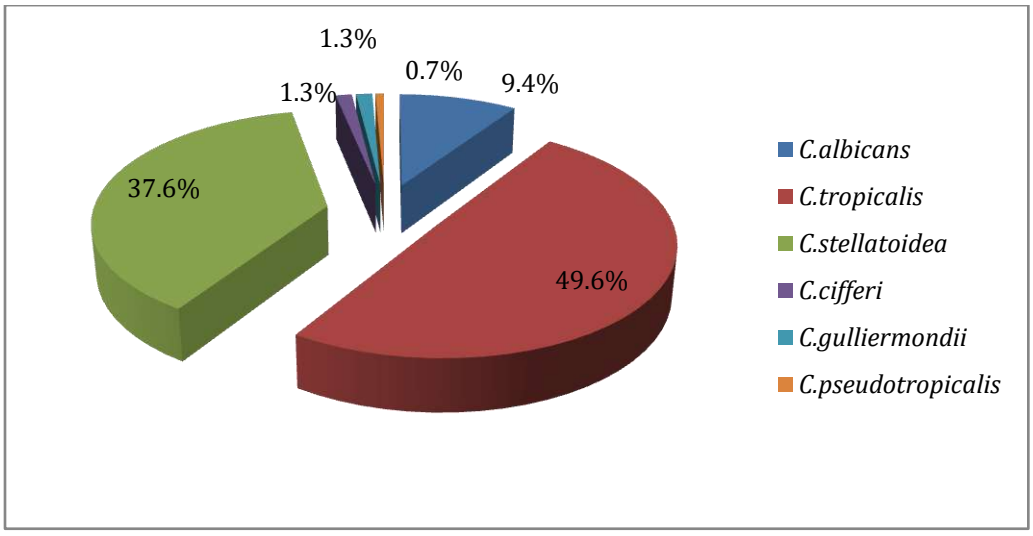


Table 8- Gender wise distribution of patients with fungal infection (n=216)

Gender	n (%)
Male	141(65.3)
Female	75(34.7)

Maximum number of fungal isolates was obtained from male patients (65.3%) as compared to female patients (34.7%)

Figure 6- Gender wise distribution of patients with fungal infection (n=216)

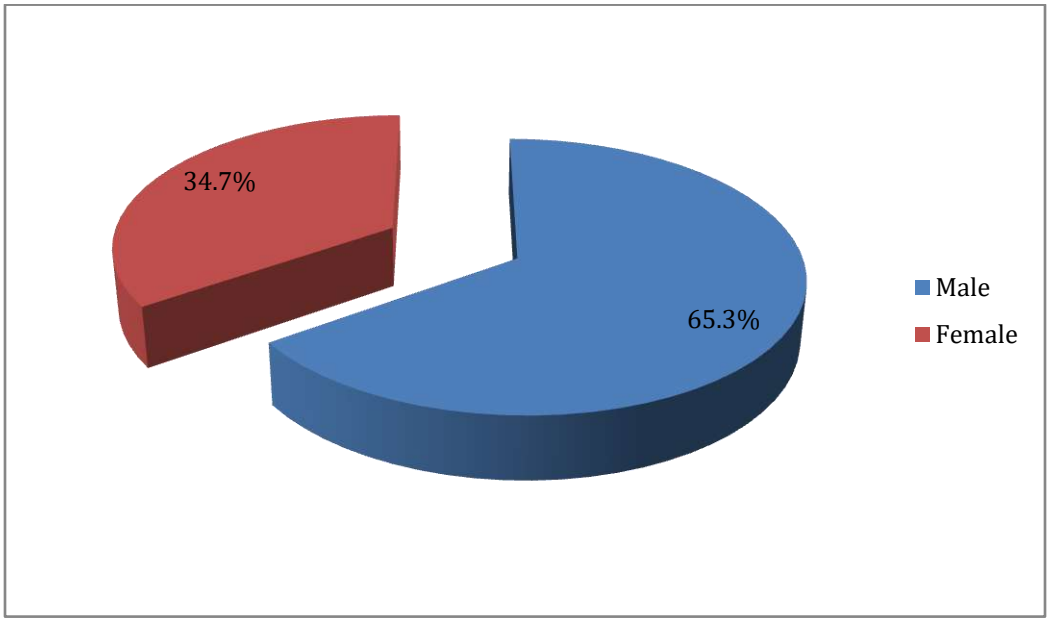


Table 9- Age wise distribution of patients with fungal infections. (n=216)

Age group	n (%)
< 10	15(6.9)
11-20.0	8(3.7)
21-30	18(8.4)
31-40	26(12)
41-50	29(13.4)
51-60	50(23.1)
61-70	47(21.8)
71-80	18(8.3)
81-90	4(1.9)
> 90	1(0.5)

Among 216 patients, majority of patients belong to 51-60 years (23.1%), followed by 61-70 years (21.8%)

Figure 7- Age wise distribution of patients with fungal infection (n=216)

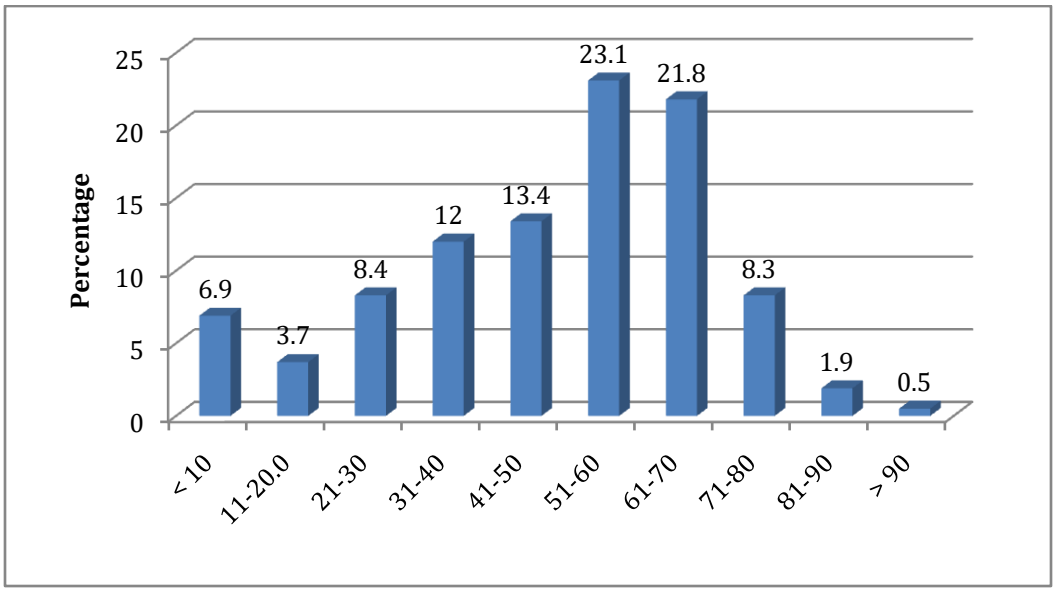


Table 10- Area wise distribution of patients with fungal infection (n= 216)

Location	n (%)
Medicine	128(59.3)
ICU	49(22.7)
Surgery	25(11.5)
Paediatrics	14(6.5)

Maximum no. of patients with fungal infections were from medicine wards (59.3%) followed by ICU's (22.7%)

Figure 8- Area wise distribution of patients with fungal infection (n= 216)

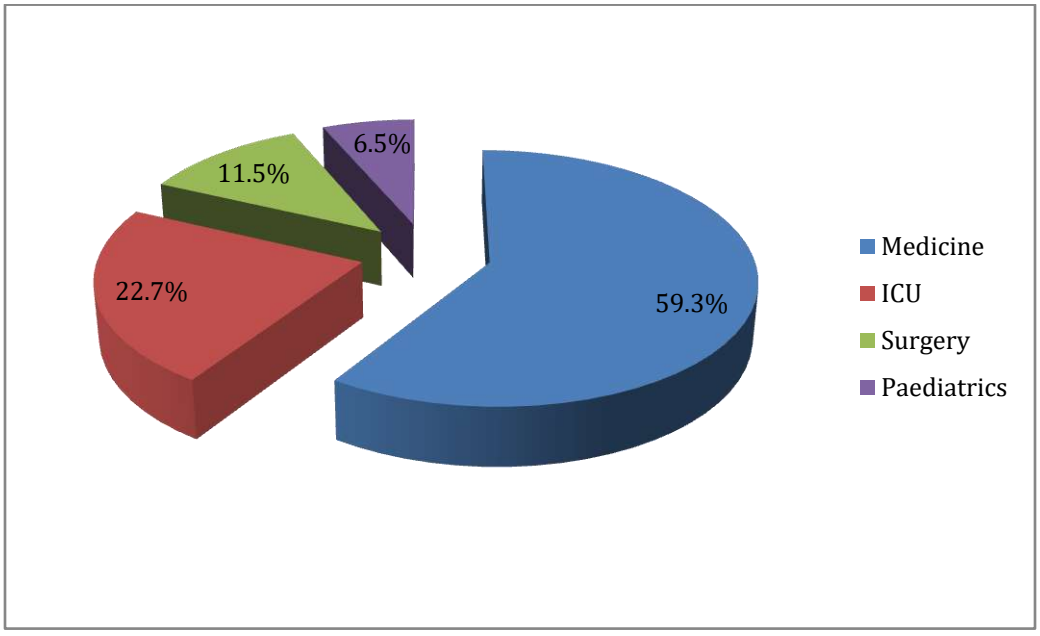
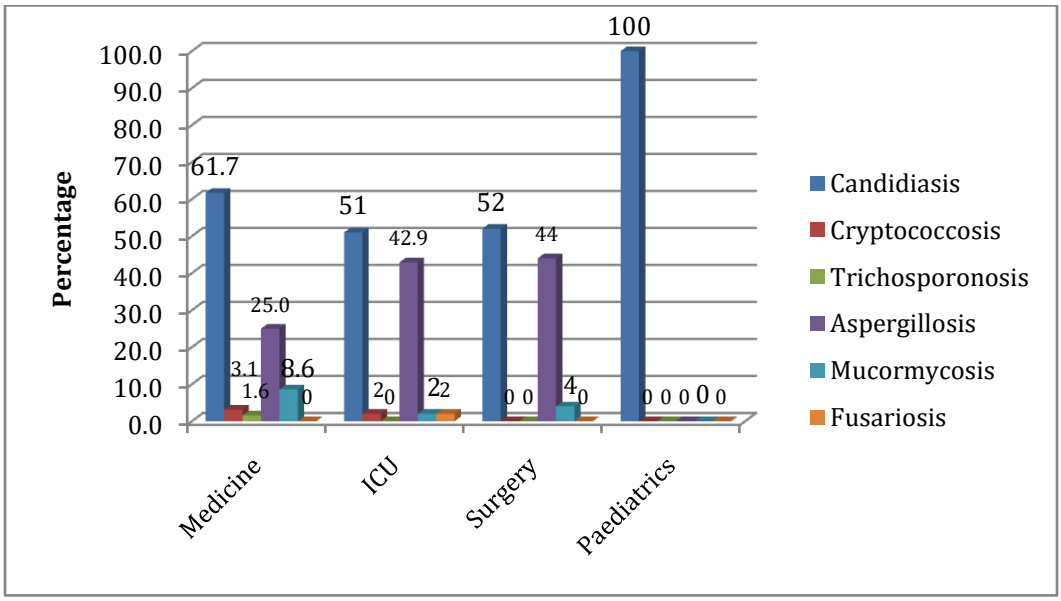


Figure 9- Area wise distribution of fungal infections (n=216)



Candidiasis followed by aspergillosis was most common infection observed in medicine, ICU and surgery wards.

Table 11- Distribution of risk factors in patients with fungal infections. (n=216)

Risk factors	n (%)
Steroid therapy	46(21.3)
Diabetes mellitus	39(18.1)
Hypertension	30(13.8)
Chronic kidney disease	5(2.3)
HIV	2(0.9)
Malignancy	2(0.9)

Most common risk factor was steroid use(21.3%)followed by diabetes mellitus(18.1%).

Figure 10- Distribution of risk factors in patients with fungal infections. (n=216)

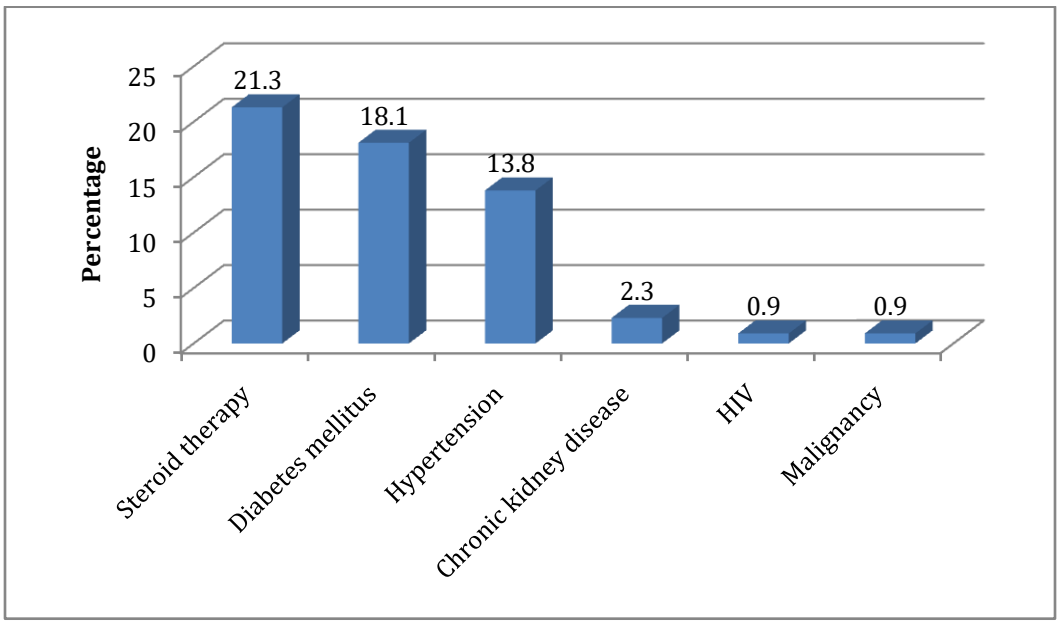


Table 12- Distribution of clinical symptoms among patients with fungal infections(n=216)

Clinical symptoms	n (%)
Fever	141(65.3)
Shortness of breath	89(41.2)
Pain abdomen	54(25.0)
Cough with expectoration	50(23.1)
Vomiting	42(19.4)
Nausea	2(0.9)

Most common presenting symptom was fever (65.3%) followed by shortness of breath(41.2%) and cough(23.1%)

Figure 11-Distribution of clinical symptoms among patients with fungal infections. (n=216)

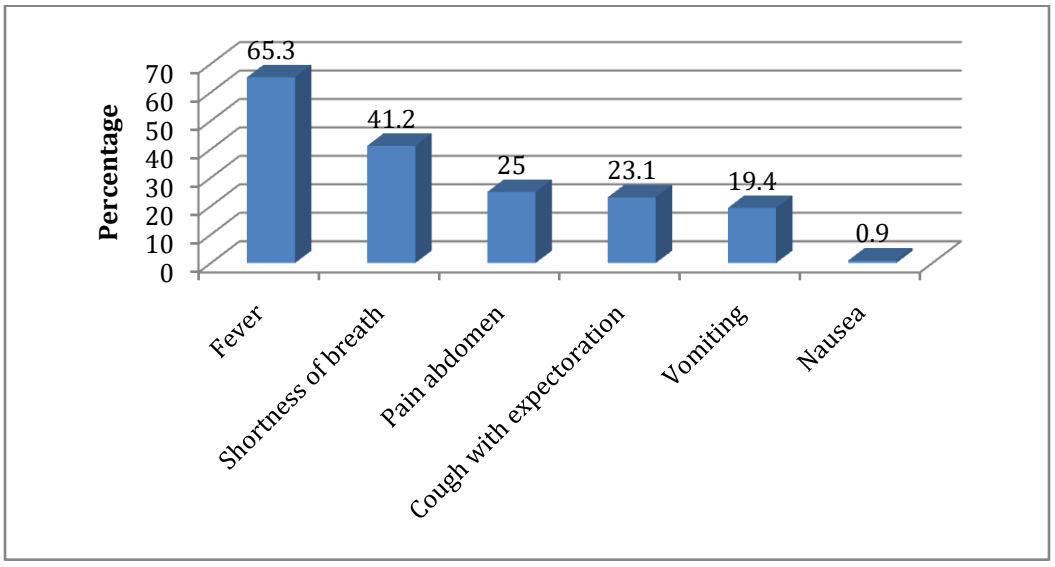


Table 13- Clinical categorisation of fungal infections (n=216)

Fungal infections	n(%)
Candidiaisis	131(60.6)
Cryptococcosis	5(2.3)
Trichosporinosis	2(0.9)
Aspergillosis	63(29.2)
Mucormycosis	13(6.0)
Fusariosis	1(0.5)
Aspergillosis + Mucormycosis	1(0.5)

Most common fungal infection was Candidiasis(60.6%)followed by Aspergillosis (29.2%) and Mucormycosis (6.0%). Among 2 cases of Trichosporon infection, 1 was trichosporonemia and other was Trichosporon pneumonia. 1 case of Fusarium keratitis was observed.

Figure 12- Clinical categorisation of fungal infections (n=216)

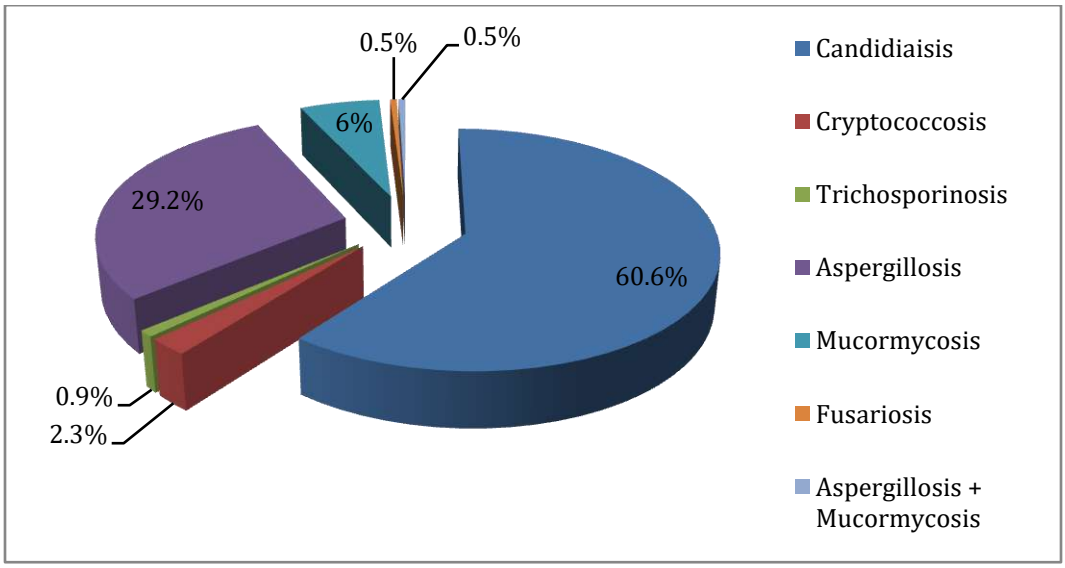


Table 14- Characterization of candida infections. (n=131)

Candida infections	Sample	n(%)
Invasive candidiasis		**128(97.7)**
Candidemia	Blood	93(71.0)
Candidiasis	Body fluids	35(26.7)
Cutaneous candidiasis	Skin & soft tissue	**3(2.3)**

Among 131, Invasive candidiasis was seen in 97.7% patients & cutaneous candidiasis seen in 2.3% patients.

Figure 13- Characterization of candida infections. (n=131)

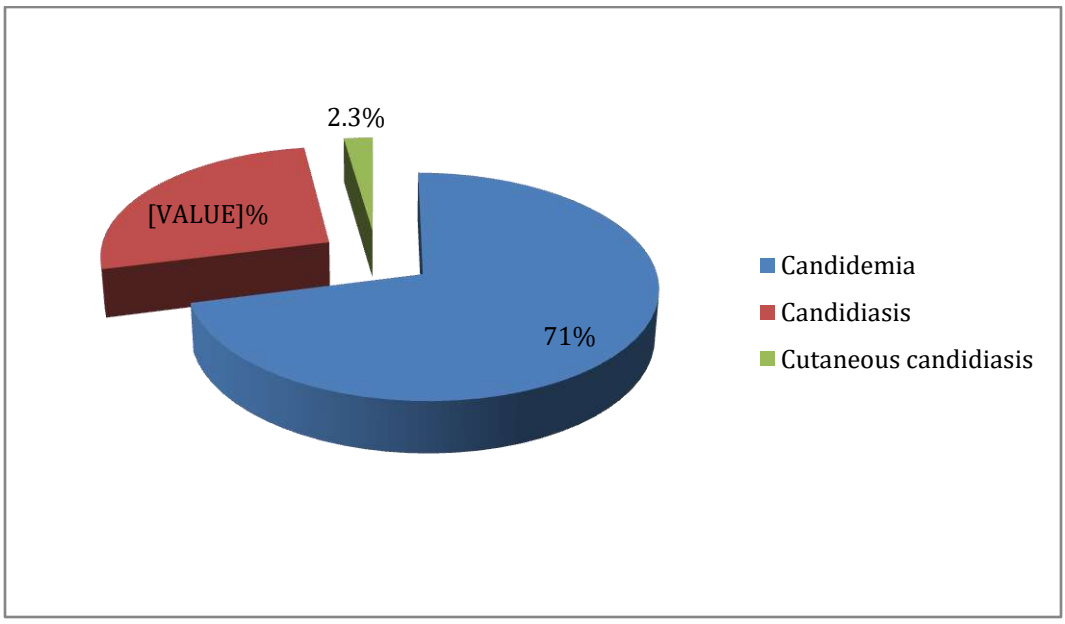


Table 15- Species wise distribution of Candida in fungal infections (n=137)

***Candida* species**	**n(%)**
C.albicans	**17(12.4)**
Non albicans candida(NAC)	**120(87.6)**
C.tropicalis	86(62.7)
C.gulliermondii	12(8.7)
C.parapsilosis	8(5.8)
C.auris	4(2.9)
C.cifferi	4(2.9)
C.pelliculosis	3(2.1)
C.lusitanie	1(0.7)
C.utilis	1(0.7)
C.glabrata	1(0.7)

Among 137 isolates, majority were non-albicans candida (87.6%) followed by *Candida albicans*(12.4%). Most common species in NAC was *Candida tropicalis* (62.7%) followed by *Candida gulliermondi* (8.7%).

Figure 14- Species wise distribution of candida in fungal infections.(n=137)

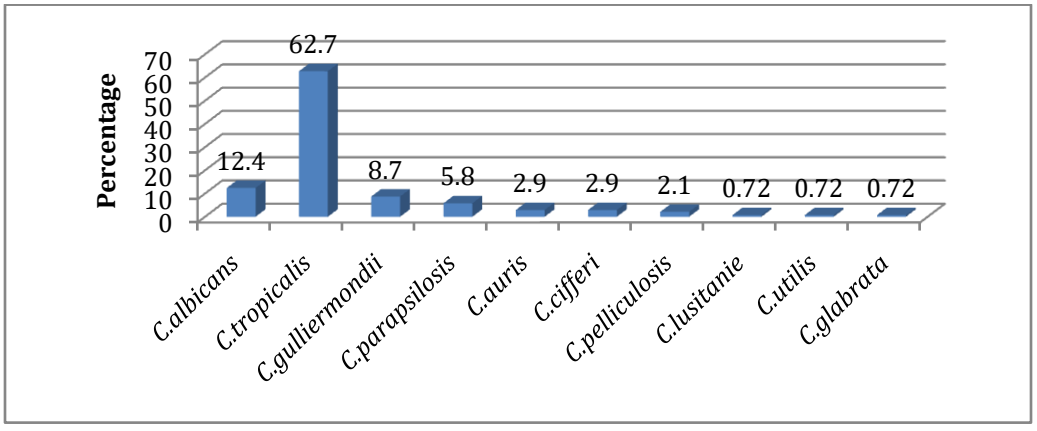


Table 16- Antifungal susceptibility profile of *Candida* species.

Antifungals	*C.albicans*(n=17)	NAC(n=120)	p-value
Fluconazole	17(100%)	87(72.5%)	0.013
Voriconazole	15(88.2%)	99(82.5%)	0.554
Amphoterecin-b	16(94.1%)	107(89.2%)	0.528
Micafungin	17(100%)	96(80%)	0.042
Caspofungin	17(100%)	98(81.7%)	0.054

In *Candida albicans* 100% susceptibility was seen to Fluconazole and Echinocandins.

In NAC, maximum susceptibility was seen to Amphotericin-B (89.2%) followed by Voriconazole (82.5%).Susceptibility to fluconazole and micafungin in *C. albicans* was statistically significant as compared to non-albicans candida.

Figure 15- Antifungal susceptibility profile of *Candida* species.

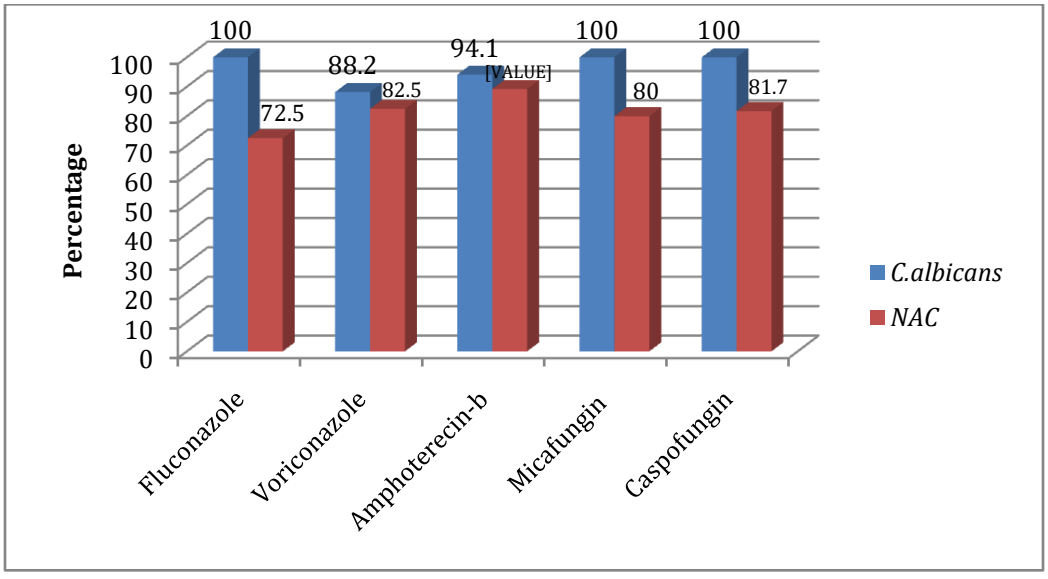


TABLE 17- Susceptibility profile of Candida species.

Species	Fluconazole	Voriconazole	Amphotericin-b	Caspofungin	Micafungin
C.albicans(17)	100%	88.20%	94.10%	100%	100%
C.tropicalis(86)	79.90%	87.30%	96..2%	93.60%	89.90%
C.parapsilosis(8)	62.50%	87.50%	100%	100%	87.50%
C.cifferi(4)	-	75%	75%	-	-
C.pelliculosis(3)	66.70%	100%	100%	/	/
C.lusitanie(1)	100%	100%	100%	100%	100%
C.utilis(1)	100%	100%	100%	-	-
C.glabrata(1)	-	100%	100%	100%	100%

Candida albicans showed 100% susceptibility to fluconazole, caspofungin and micafungin.

C.parapsilosis(62.5%) and C.pelliculosis (66.7%) showed minimum susceptibility to fluconazole.

Table 18- Antifungal susceptibility profile of *Candida* species in blood & body fluids

Antifungals	Blood 96(%)	Body fluids 37(%)	p-value
Fluconazole	71 (73.9)	28(75.7)	0.838
Voriconazole	81 (84.4)	29(78.4)	0.877
Amphoterecin-b	90(93.8)	30(81.1)	0.027
Micafungin	80 (83.3)	31(83.8)	0.95
Caspofungin	83(86.5)	32(86.5)	0.996

Higher susceptibility of voriconazole (84.4%) and amphotericn-b (93.8%) was observed in candidemia as compared to 78.4% and 81.1% respectively in body fluids. Susceptibility of amphotericin-b was statistically significant in candidemia as compared to candidiasis in body fluids.

Figure -16 Antifungal susceptibility profiles of *Candida* species in blood & body fluids

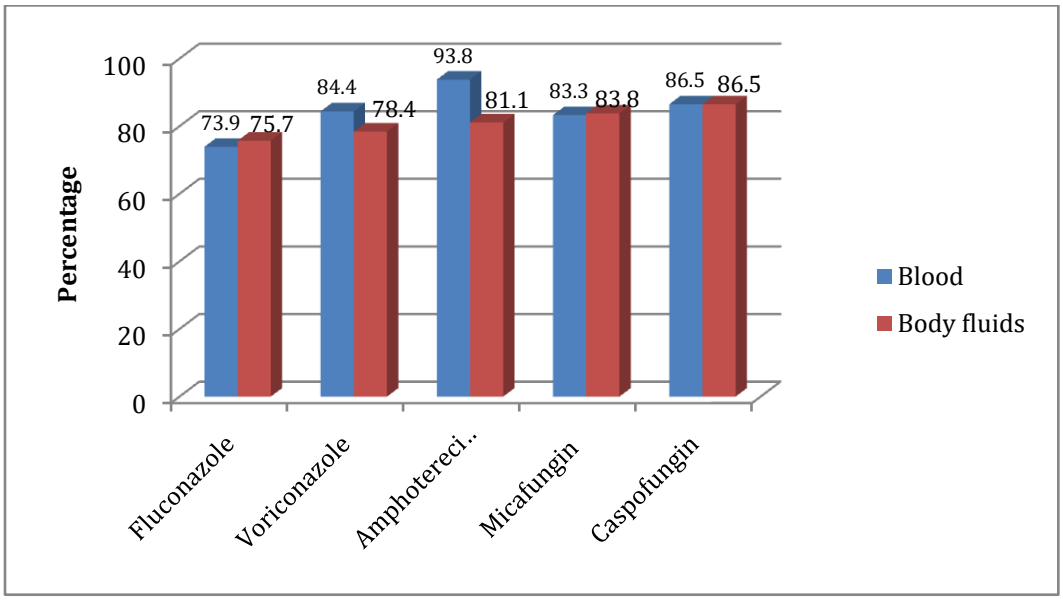


Table 19- Comparison of in-vitro susceptibilities of various antifungals against *Candida species* (n=137) % of isolates at MIC(ug/ml)

Species	Antifungal	<0.06	0.12	0.25	0.5	1	2	4	8	16	32	>64
	Fluconazole				13(76.5%)	1(5.9%)	3(17.6%)					
	Voriconazole		15(88.2%)		1(5.9%)			1(5.9%)				
Candida albicans	Caspofungin		17(100%)									
(n=17)	Amphoterecin-b				8(47.1%)	8(47.1%)	1(5.9%)					
	Micafungin	17(100%)										
	Fluconazole				32(26.7%)	50(41.7%)			10(8.3%)	5(4.2%)	9(7.5%)	
	Voriconazole		94(78.3%)			1(0.8%)	7(5.8%)	3(2.5%)	2(1.7%)			
Non-albicans candida	Caspofungin		80(66.7%)	10(8.3%)	3(2.5%)	1(0.8%)			5(4.2%)			
(n=120)	Amphoterecin-b			30(25%)	72(60%)				5(4.2%)			
	Micafungin	91(75.8%)						3(2.5%)	5(4.2%)			

MIC breakpoints for fluconazole- 7.5% of NAC had higher MIC 32 ug/ml.

Whereas in *Candida albicans* highest MIC of 2 ug/ml was reported in 17.6% isolates.

Voriconazole had minimum MIC OF 0.12 ug/ml for all C*andida species*.

Amphotericin-B showed the minimum MIC of 0.25 ug/ml in 25% NAC , whereas in *Candida albicans* minimum MIC was 0.5 ug/ml for 47.1% isolates.

Minimum MIC for Micafungin was observed to be 0.06 ug/ml in 100% *Candida albicans* and 75.8% in AC.

Caspofungin showed a minimum MIC of 0.12 ug/ml for 100% isolates of C*andida albicans* and 66.7% isolates of NAC.

Table 20 - Clinical characterization of cryptococcal infections (n=5)

Cryptococcal infection	n(%)
Cryptococcal meningitis	4(80)
Cryptococcal pneumonia	1(20)

All the 4 patients with cryptococcal meningitis had capsulated budding yeast cells on India ink and positive cryptococcal Antigen test and all of them were HIV reactive.

Figure 17 -Clinical characterization of cryptococcal infections(n=5)

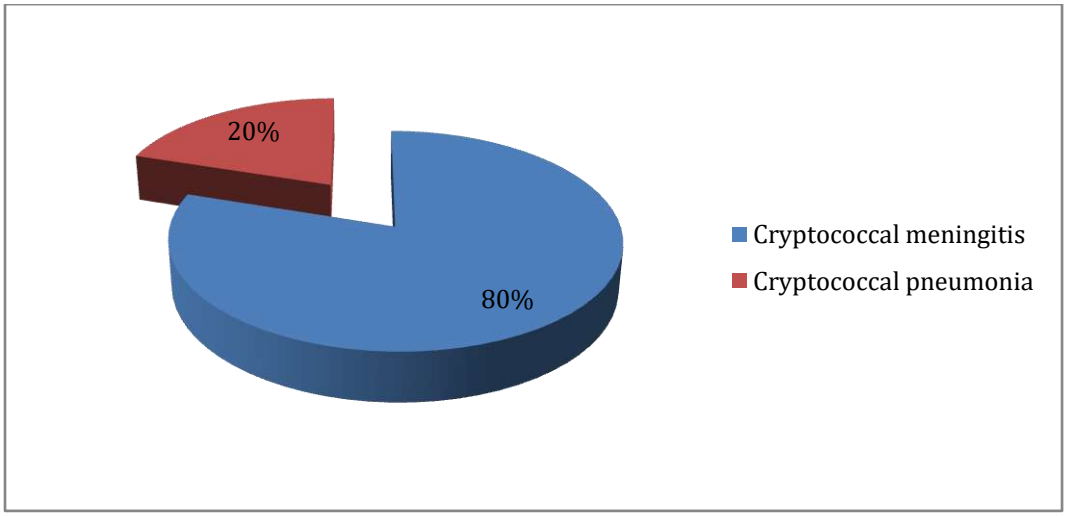


Table 21- Species wise distribution of *Cryptococcus.* (n=5)

Cryptococcus spp.	**n (%)**
Cryptococcus neoformans	4(80)
Cryptococcus laurentii	1(20)

Out of 5 cryptococcus species, 4 isolates of *Cryptococcus neoformans* and 1 *Cryptococcus laurentii* was seen.

Figure 18- Species wise distribution of *Cryptococcos.* (n=5)

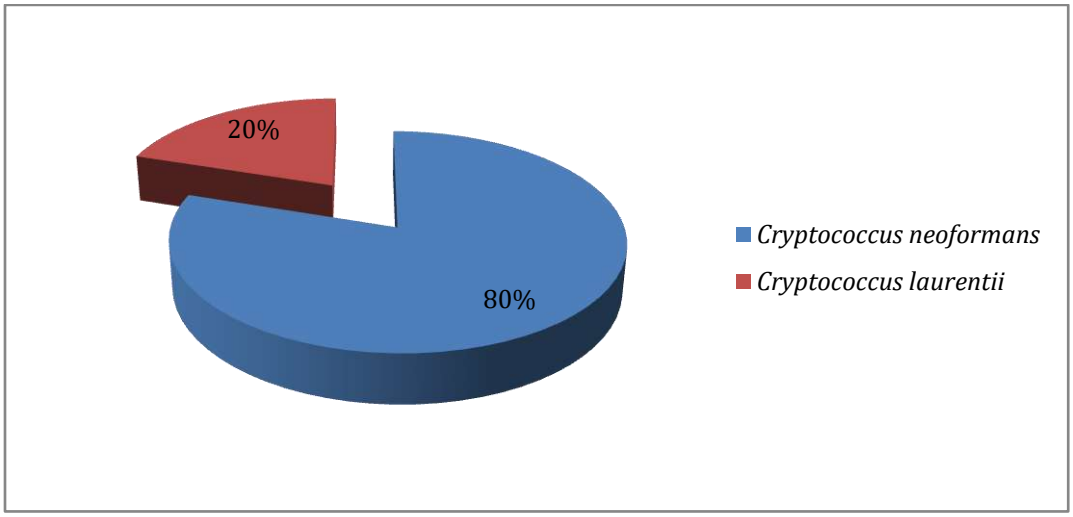


Table 22–Clinical characterization ofAspergillosis.(n=63)

Characterization of aspergillosis	n(%)
Pulmonary aspergillosis	45(71.4)
Sinonasal aspergillosis	12(19.1)
Cutaneous aspergillosis	5(7.9)
Ocular aspergillosis	1(1.6)

Among 63 cases of aspergillosis, most common infection was pulmonary aspergillosis (71.4%) followed by sino-nasal aspergillosis(19.1%).

Figure 19 - Clinical characterization of aspergillosis(n=63)

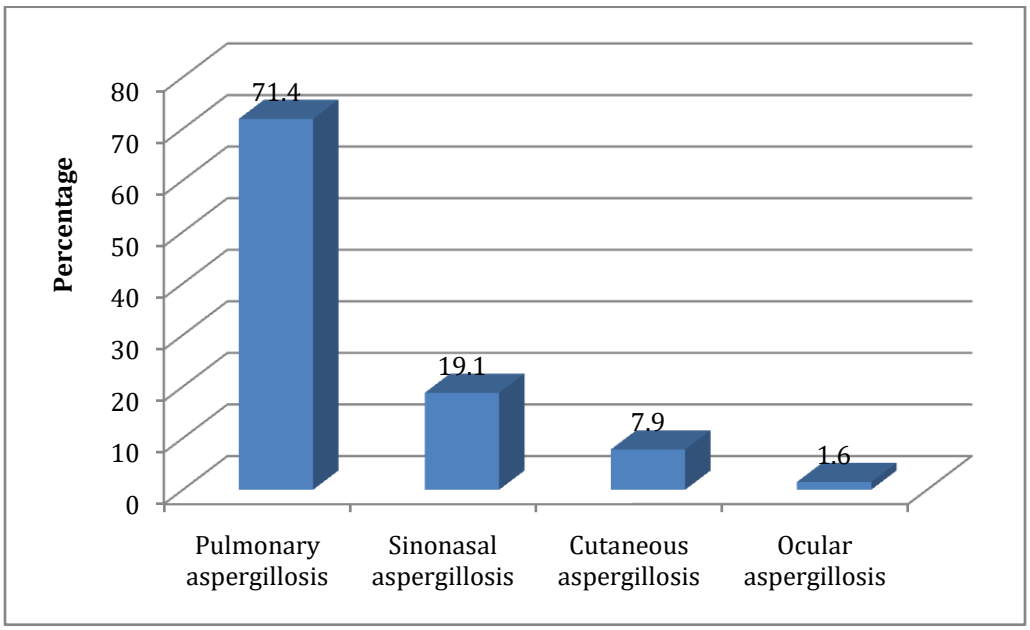


Table 23– Species wise distribution of *Aspergillus*(n=63)

Species	n(%)
Aspergillus flavus	49(77.8)
Aspergillus fumigatus	14(22.2)

Most common species obtained was *Aspergillus flavus* (77.8%) followed by *Aspergillus fumigatus*(22.2%).

Figure 20 -Species wise distribution of *Aspergillus.(*n=63)

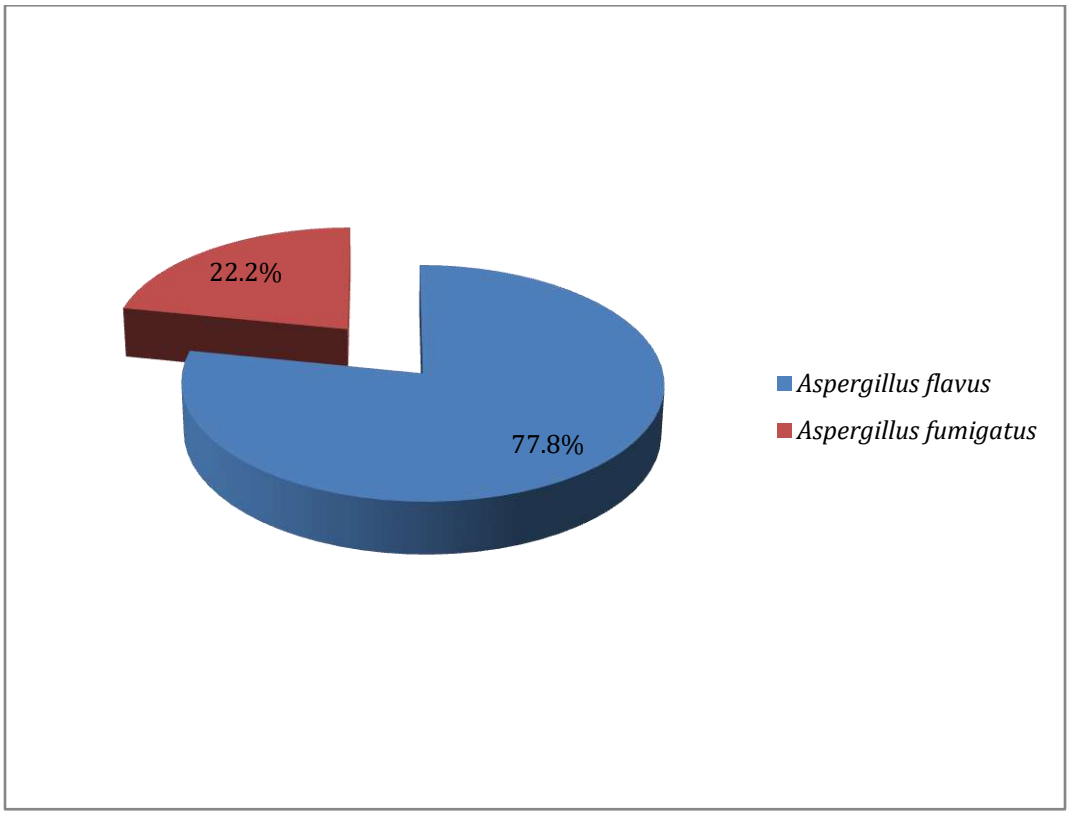


Table 24 - Radiological findings in patients with pulmonary aspergillosis.(n=32)

Radiological findings	n(%)
Consolidation	7(21.9)
Ground glass opacity + consolidation	7(21.9)
Ground glass opacity	6(18.8)
Cavitatory lesions	5(15.6)
Consolidation + Ground glass opacity + cavitatory lesions	4(12.5)
Consolidation + cavitatory lesions	3(9.4)

Out of 45 cases of pulmonary aspergillosis, radiological study was done in 32 cases. Most common findings were consolidation (21.9%) and consolidation with ground glass opacity(21.9%).

Serological findings-Out of 45 cases of pulmonary aspergillosis, Galactomannan assay wasreceived in 38 patients, out of which 20 were positive. Percentage positivity of 52.6% was observed.

Classification of invasive aspergillosis-According to EORTC criteria, there were 45 Possible, 32 Probable and no proven casewas observed of invasive aspergillosis.

Figure 21- Radiological findings in patients with pulmonary aspergillosis.(n=32)

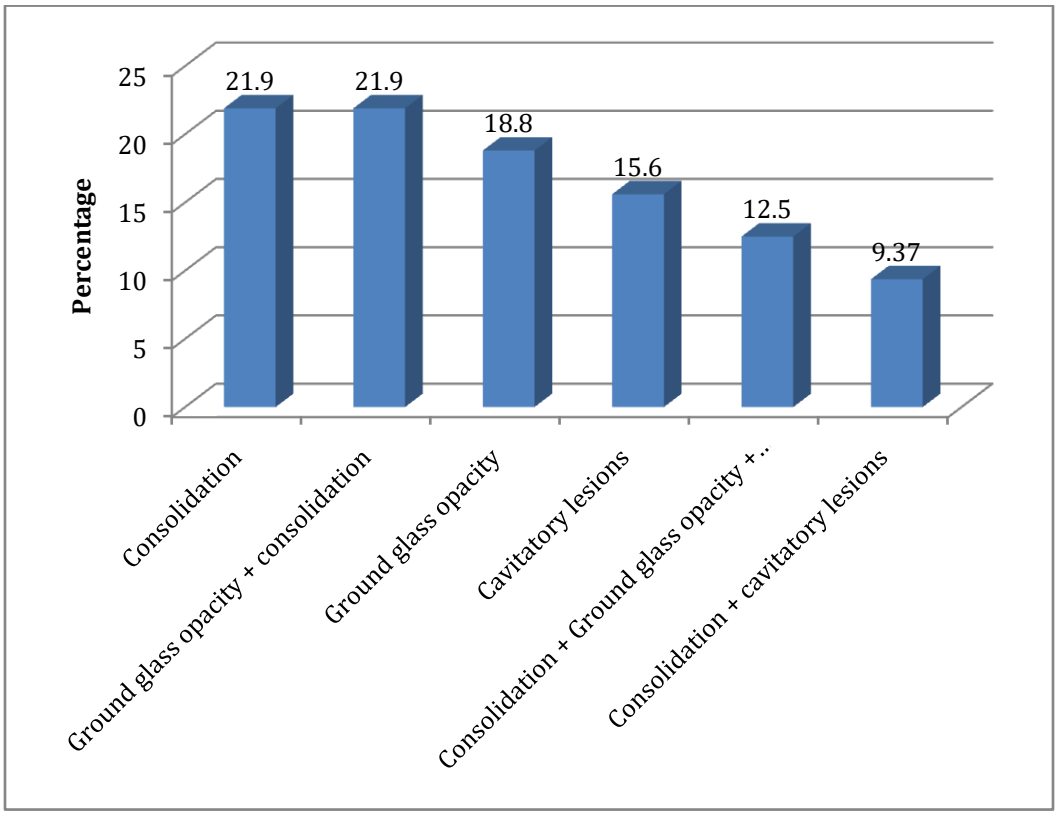


Table 25- Radiological findings in sino-nasal aspergillosis.(n=5)

Radiological findings	n(%)
Right maxillary antrum sinusitis	1(20)
Frontal sinusitis	1(20)
Left maxillary sinusitis	1(20)
Rhino sinusitis	1(20)
Pansinusistis	1(20)

Among 11 cases of sino-nasal aspergillosis, radiological findings were seen in 5 patients.

In 3 patients, Histopathological findings were seen which were consistent with radiological findings.

Figure 22- Radiological findings in sino-nasal aspergillosis.(n=5)

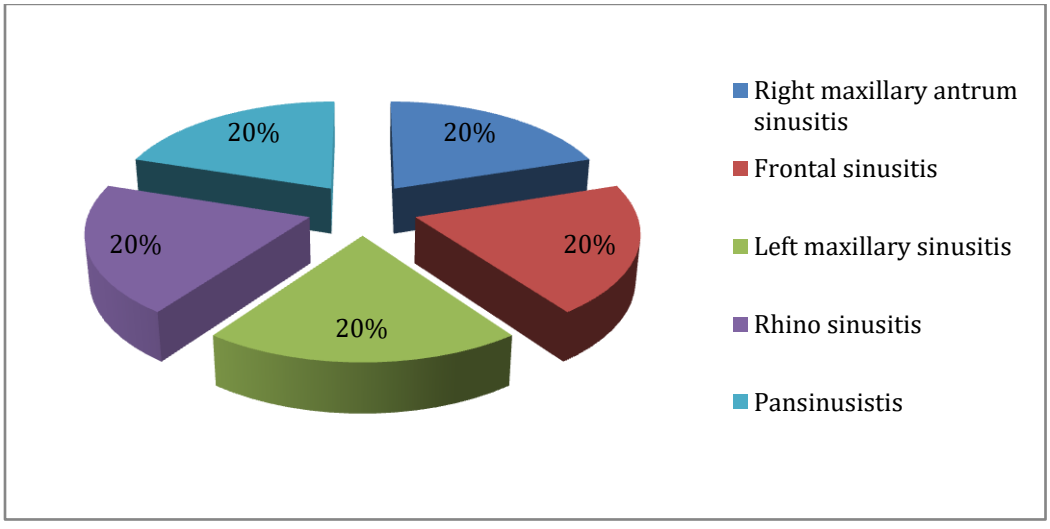


Table 26- Antifungal susceptibility profile of *Aspergillus* (n=3)

SPECIES	ANTIFUNGAL	<0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8
	Amphoterecin-b								2(66.6%)	1(33.3%)		
	Voriconazole					3(100%)						
Aspergillus spp.	Caspofungin						1(33.3%)					2(66.6%)
(n=3)	Itraconazole			1(33.3%)		2(66.6%)						
	Posaconazole			1(33.3%)	1(33.3%)							

Voriconazole had minimum MIC of 0.12 ug/ml for all *aspergillus* species.
Amphotericin-B showed the minimum MIC of 1ug/ml in 66.6% isolates.
MIC breakpoints for caspofungin 66.6% had higher MIC of 8 ug/ml.
Itraconazole and Posaconazole had minimum MIC of 0.03 ug/ml in 33.3% isolates.
Out of 64 cases, 14 patients got discharged before the culture report and 47 patients responde well to the empirical antifungal therapy. So. MIC susceptibility request was not received for A*spergillus* isolates.

Table 27-Characterisation of Mucormycosis(n =13)

Mucormycosis	n(%)
Sino-nasal mucormycosis	8(61.5)
Abdominal wall mucormycosis	4(30.8)
Pulmonary mucormycosis	1(7.7)

Out of total 13 cases of mucormycosis, most common infection was Sino-nasal mucormycosis (61.5 %) followed by abdominal wall mucormycosis(30.8%).Out of 13 cases, Histopathology was done in 9 cases, which all were co-insiding with the culture reports.

Figure 23- Characterisation of Mucormycosis (n =13)

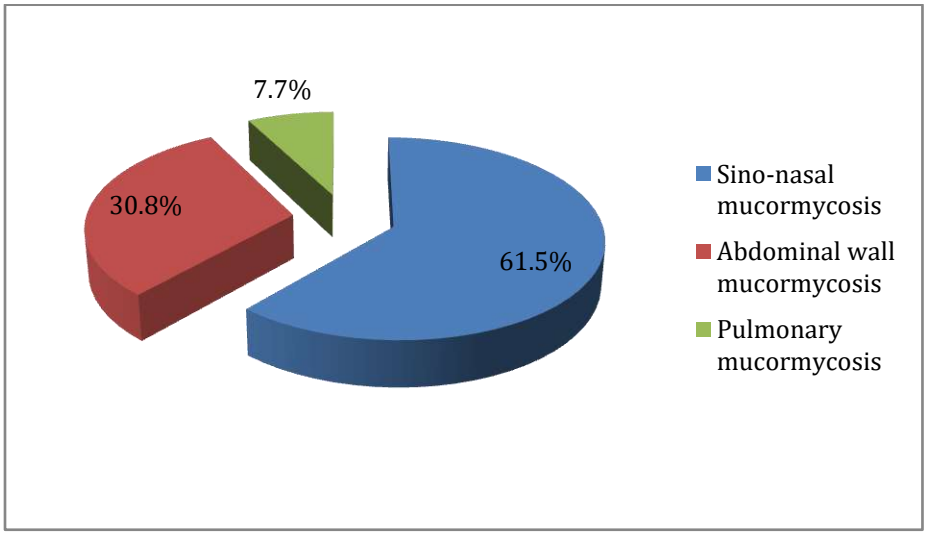


Table 28– Species wise distribution of Mucorales.(n=14)

Mucorales	n(%)
Rhizopus spp.	8(57.2)
Mucor spp.	6(42.8)

Among the 14 isolates, most commom species was *Rhizopus*(57.2%) followed by *Mucor*(42.8%)

Figure 24- Species wise distribution of Mucorales.(n=14)

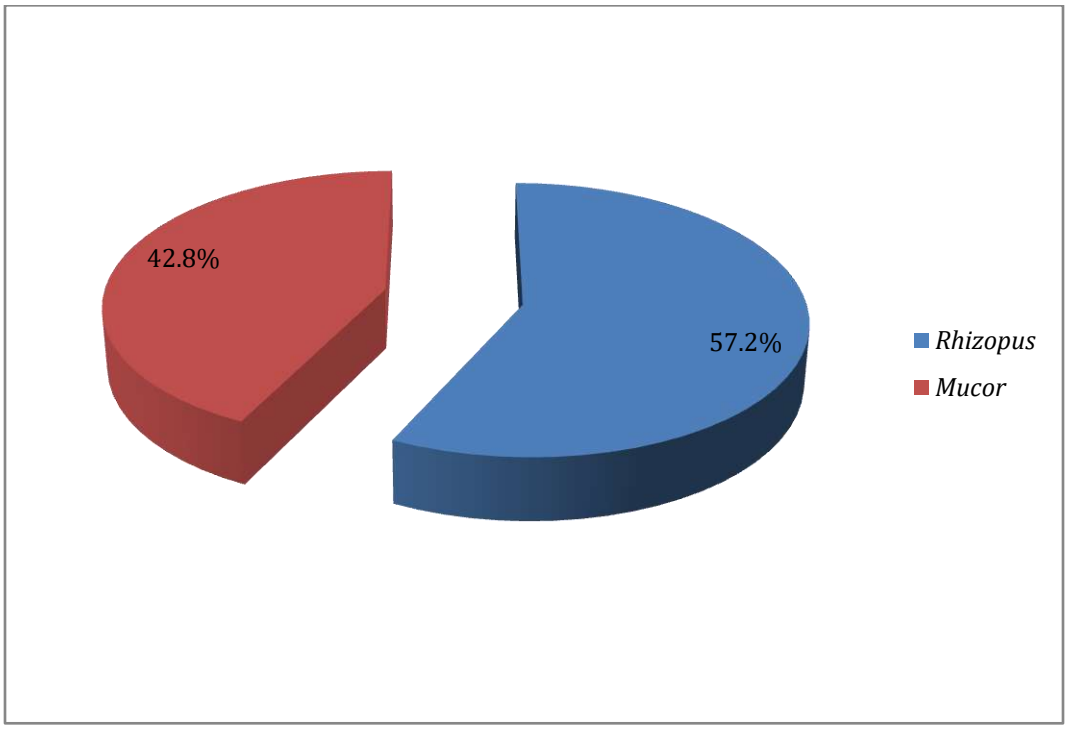


Table 29- Antifungal treatment given in patients (n=216)

Patients on antifungals	n(%)
Yes	143 (66.2)
No	73(33.8)

Among 216 patients, 143(66.2%) received antifungal treatment.

Figure 25- Antifungal treatment given in patients(n=216)

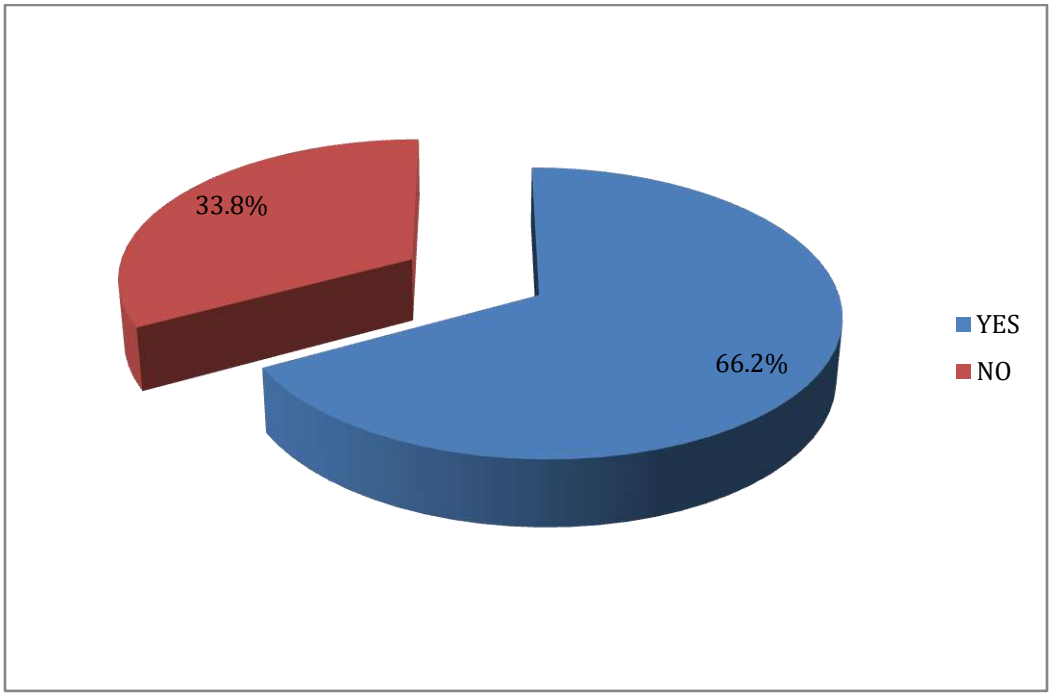


Table 30- Distribution of antifungals given in fungal infections. (n=143)

Clinical diagnosis	Fluconazole	Voriconazole	Posaconazole	Amphotericin-b	Caspofungin	Others
Candidiasis (89)	49	31	_	2	2	_
Aspergillosis (39)	_	28	1	1	4	4
Zygomycosis (11)	_	3	_	7	_	1
Cryptococcosis (3)	2	_	_	_	1	_
Fusariosis (1)	_	_	_	_	1	_

Out of 143 patients, most commom antifungal given in candidiasis was fluconazole followed by voriconazole. In Aspergillosis, most common drug used was voriconazole. In Zygomycosis, amphotericin-b was the most commonly used antifungal.

Figure 26- Distribution of antifungals given in fungal infections (n=143)

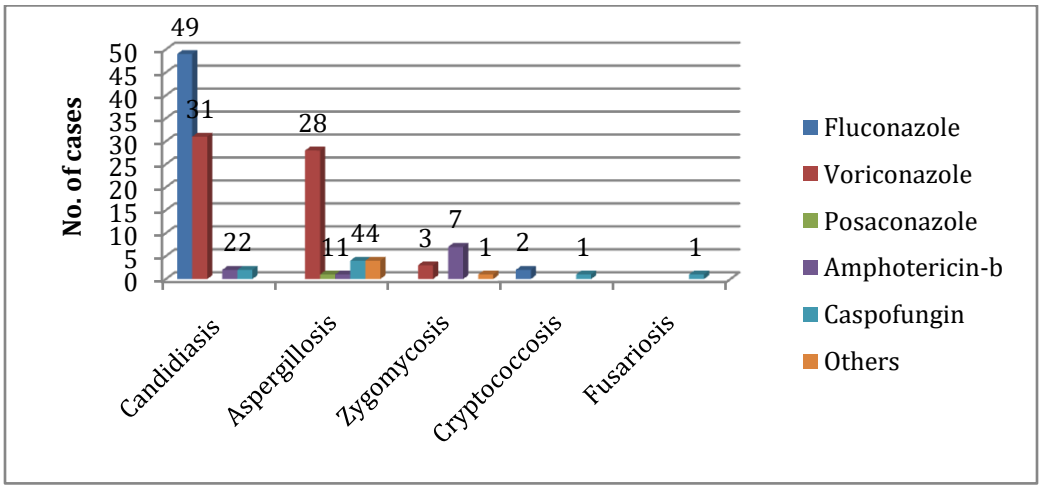


Table 31- Clinical Outcome of patients. (n=216)

Clinical outcome of patients	n(%)
Discharged	204(94.4)
Expired	12(5.6)

Out of 216 patients with fungal infections, 94.4%patients improved symptomatically and discharged and 5.6 % expired.

Figure 27- Clinical Outcome of patients. (n=216)

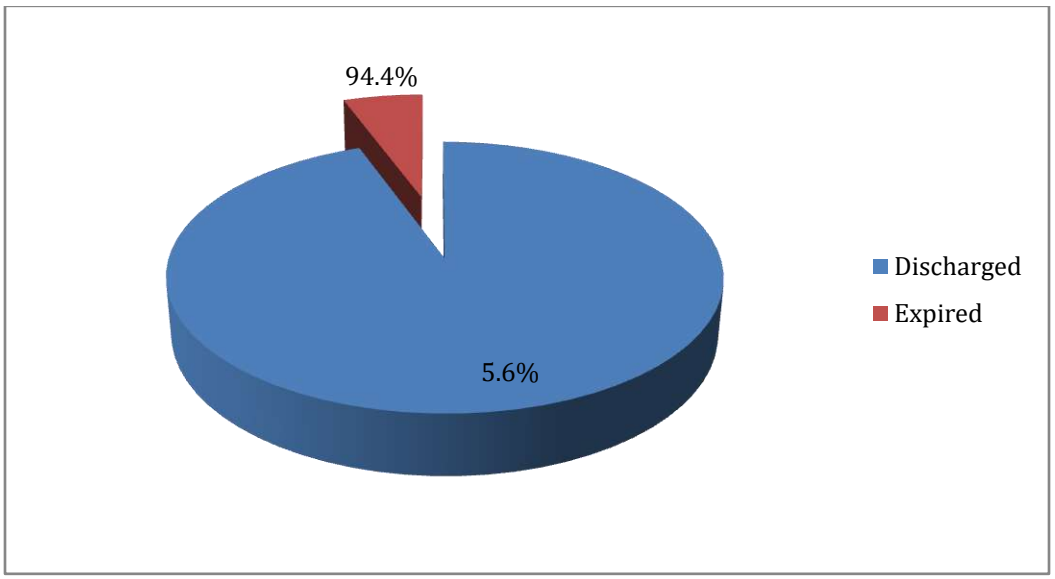


Table 32- Comparison of various parameters with the outcome of patients. (n=216)

	Discharged	EXPIRED-12(%)	p-value
	204(%)		
Age			
<60	146(71.6%)	4(33.3%)	0.005
>60	58(28.4%)	8(66.7%)	
Gender			
Females	137(67.2%)	8(66.7%)	0.972
Males	67(32.8%)	4(33.3%)	
Hospital stay			
<14 days	46(22.5)	5(41.6%)	0.129
>14 days	158(77.5%)	7(58.4%)	
Risk factors			
Diabetes mellitus	61(29.9%)	6(50%)	0.219
Hypertension	57(27.9%)	4(33.3%)	0.687
Chronic kidney disease	14(6.8%)	3(25%)	0.023
On steroid therapy	42(20.58%)	3(25%)	0.715
Fungal Infections			
Candidiaisis	123(60.3%)	8(66.6%)	0.661
Cryptococcosis	5(2.5%)	0	0.583
Trichosporinosis	2(0.9%)	0	0.73
Aspergillosis	61(29.9%)	2(16.7%)	0.327
Mucormycosis	11(5.4%)	2(16.7%)	0.111
Fusariosis	1(0.5%)	0	0.808
Aspergillosis + Mucormycosis	1(0.5%)	0	0.808

Antifungals therapy given	134(65.7%)	9(75%)	0.507
Antifungal susceptibility profile (candidiasis)			
Voriconazole	81%	67%	0.231
Fluconazole	74%	50%	0.070
Amphotericin -b	90.20%	58.30%	0.0008
Caspofungin	84.20%	50%	0.0024
Micafungin	80.40%	50%	0.0124

Among expired patients, elderly age group (66.7%), more risks factors and less susceptibility to antifungals has been observed as compared to patients who were discharged. Significant difference was observed in age group among patients who were discharged and who expired (p=0.005). Statistically significant difference was observed in sensitivity of amphotericin-b (p=0.0008), caspofungin (0.0024) and micafungin (0.0124) among discharged and expired patients.

DISCUSSION

This prospective study was conducted in the Department of Microbiology, Dayanand Medical College and Hospital, Ludhiana for the period of 1 year. A total of 19698 samples were received in the laboratory from the admitted patients. Maximum no. of samples received were blood sample (78.08%) followed by body fluids (18.54%) and respiratory samples(2.45%). The clinical and microbiological profiles of cases of fungal infections were studied.

Out of total samples received, fungal infection was seen in 1.88% (372) isolates. Whereas in a study conducted by Ahir HR*et al*[32] reported higher positivity (6.7%) of fungal isolates.

Among the total isolates, 223(59.9%) isolates were considered as true infections obtained from 216 patients. Out of 223, 210 isolates were from single site and 12 were from multi-site. Similar findings were seen by Montes K *et al*[84] in which177 yeast isolates were isolated from 167 samples. In 10 samples, two different species of yeasts were obtained.

In our study, from 1 respiratory sample, 2 isolates were obtained which were considered as polymicrobial. In accordance to this, a study by Ravindra MC *et al*[85] two similar cases from Puducherry, India were diagnosed with polymicrobial infection with *Mucor* and *Aspergillus.*

Out of 372 isolates, fungal colonization was observed in 149(40.1%) isolates from respiratory (sputum, endotracheal tube, broncho-alveolar lavage, suction tip) and urine samples. Similar results were observed by Alenazya et al[86] in which out of 9825 patients, 3886 (40%) colonization was observed.

Fungal infections were more common in males 141(65.3%) as compared to females 75(34.7%) in our study. This can be explained by the fact that the males are more exposed to fungal spores during working with the decaying vegetation in agriculture fields. These findings were more accordant with the study conducted by LinSJ *et al.* which showed out of 225, 162 (72%) were males and 63 (28%) were females[87].Whereas some studies shows, the prevalence of all types of mycoses among females was 1.3 times higher (8.15%) than in males (6.09%).[88]

Among 216 patients, majority of patients belong to elderly age group 51-60 years (23.1%) in our study. This can be explained by the fact of immunocompromised status in elderly population. Marrin K *et al*[89] observed 50-70 years most common age group. (Range 20-95 years). In our study, only 6.9% patients were below 10 years, whereas Ahmed S *et al*.[41] in a study of 71 patients of candidemia, maximum patients belong to age group <1 month(47.89%) followed by infants(25.35%).

Majority of the patients were admitted in medical wards(59.3%) followed by ICU(22.7%).In contrast to this, some studies showed a significant increase in candidemia incidence in ICU's from 0.86 cases/10,000 PDs in 2006 to 2.12 cases/10,000 PDs in 2012.[3,4]In accordance to our study, Chen S*et al*[90] reported majority of fungal infections in medical wards 390 [35.6%] followed by critical care units 273 [24.9%] and surgical wards[17.3%].

Among the various risk factors studied in the present scenario,most common was chronic steroid use (21.29%) followed by diabetes mellitus (18.05%).Similarly in a study by Ahmadikia K *et al* [91] in 2021 the use of steroids therapy was a prominent risk factorin development of mucormycosis in 66.7% of patients with viral pneumonia. In a study by, Singh G et al.[92] in patients with invasive fungal diseases, most common risk factor was diabetes mellitus(41.9%) followed by mechanical

ventilation (40.5%).In some studies, it was observed that among all the HIV-positive patients , 13% were diagnosed with candidiasis and 5% with pneumocystis infection.[93] Malignancy was observed in 2(0.92%) of patients in our study, whereas a higher percentage of 12.8% was reported by Chakrobarti A et al in Chandigarh.[94]

Most common presentation in our study was fever(65.3%) followed by shortness of breath (41.2%) and pain abdomen(25%).Similarly Noorifard M et al[95]reported fever(100%) was the most common clinical symptom. In contrast to our study few studies reported dyspnoea as the most common symptom followed by fever and cough[96]

Candidiasis (61.4%) was most common infection in our study followed by aspergillosis(28.7%) and zygomycosis (6.2%).Similarly, Ahir HR*et al*[32]in 2018 reportedcandidiasis(97.4 %) as the most common fungal infection. Whereas in another study, prevalence of dermatophytosis was highest (5.2%) followed by that of opportunistic mycoses (1.7%).[88]

Among 131 patients with candida infections, candidemia was seen in 71.0% followed by candida in body fluids (26.7%). Other studies also showed similar results.[39]

Among candida isolates, majority of the isolates were non-albicans candida(NAC) (87.6%) followed by *Candida albicans*(12.4%).Among the 120 NAC, most common species obtained was *Candida tropicalis* (62.7%) followed by *Candida gulliermondi* (8.7%) and *Candida parapsilosis*(5.8%).A study done Ahmed S *et al*[40] in 2020 in western UP also showed dominance of NAC 61 (85.91%) over *Candida albicans*10 (14.08%) with *C. tropicalis* (35.21%) being the most common species. In contrast to our study, *Candida albicans* was the predominant pathogen (39.42%), followed by *C. parapsilosis* (34.02%) in a study by Ahmet CY *et al*[41]

The antifungal susceptibility was studied for azoles (fluconazole, voriconazole) amphotericin-b and echinocandins (caspofungin and micafungin). In our study, in *Candida albicans* 100% susceptibility was seen to Fluconazole and Echinocandins followed by 94.15 to amphoetrecin-b and least susceptibility was seen to voriconazole (88.2%). Senstivity to fluconazole and micafungin was statistically significant in *C. albicans* as compared to NAC.

In NAC isolates, maximum susceptibility was seen to Amphotericin-B (89.2%) followed by Voriconazole (82.5%).Hazrat Bilal *et al*[97] observed 100% sensitivity of *Candida glabrata* to amphotericin-b.

In the present study, higher MIC breakpoints of 32 ug/ml for fluconazole was seen in 7.5% of NAC. Whereas in Candida albicans highest MIC of 2ug/ml was reported in 17.6% isolates. Unlike to our study, Lyon GM *et al* [98] observed that, 2.3% candida isolates showed resistance to fluconazole with MIC ≥ 64 µg/ml.

Minimum MIC of 0.12 ug/ml to voriconazole was seen in 88.2% of *Candida albicans* and 78.3% NAC species. Similar findings were observed by Ahmet CY *et al* where higher susceptibility rates have been reported for voriconazole in all candida isolates.[41]

Minimum MIC of micafungin was observed to be o.o6 ug/ml in 100% *Candida albicans* and 75.8% NAC. Similarly in a study by Ahmet CY *et al*[41] all the candida isolates were sensitive to micafungin and minimum MIC of 0.06ug/ml was seen in 95% of candida albicans.

In candidemia, higher susceptibility of voriconazole (84.4%) and amphotericin-b (93.8%) observed, as compared to 78.4% and 81.1%in body fluids respectively. Whereas few studies showed decreased susceptibility to azole agents and resistance to amphotericin-b in candidemia patients.[39]

Among the 5 cases of cryptococcosis in our study, 4 were cryptococcal meningitis and 1 was cryptococcal pneumonia. All the 4 patients with cryptococcal meningitis were HIV Reactive. Despite the use of highly active antiretroviral therapy (HAART), Cryptococcosis is a significant opportunistic infection among HIV-infected persons. In contrast to present study Fang et al., 2015[99] in China the majority of cryptococcosis was reported in non-HIV patients (>80%), and also in immunocompetent hosts.*Cryptococcus neoformans* (80%) was the most common species isolated followed by *Cryptococcus laurentii* (20%) in our study.

In our study, among 64 cases of aspergillosis, most common manifestation was pulmonary aspergillosis (71.9%) followed by sino-nasal aspergillosis (18.8%), cutaneous aspergillosis(7.8%) and ocular aspergillosis (1.6%).Similarly in a study by Swu-Jane Lin et al[87], 70% of the infections were pulmonary and 9% of patients had disseminated and/or CNS aspergillosis.

Aspergillus flavus is an opportunistic pathogen in immunocompromised individuals. Out of 64 cases, *Aspergillus flavus* (78.13%) was the most common species obtained followed by *Aspergillus fumigates* (21.88%)in the present study. Like this in a study by Jishnu TB *et al* [68]observed *aspergillus flavus* was the most predominant species and was identified in 46 (63.80%) cases of Aspergillosis. Unlike to this, Tashiro T*et al*[100] observed *A. fumigatus* (41%) and *A. niger* (32%), as the predominant species.

In our study, out of 45 cases of pulmonary aspergillosis, radiological study was done in 32 cases. The most common finding was consolidation (21.87%) and consolidation with ground glass opacity(21.87%). Similar findings were observed in study conducted by Logan PM et al.[101] Out of 38 patients evaluated for the galactomannan assay 20 were positive.

Higher positivity was seen in our study. In contrast to this, lower positivity was seen in other studies.[103]

In the present scenario, suspicion of Invasive pulmonary Aspergillosis(IA) were categorized. Cases of A were further classified as probable IA-32 and possible IA-45 and no case was as proven as per European Organization for Research and Treatment of Cancer/Invasive Fungal Infections Cooperative Group and the National Institute of Allergy and Infectious Diseases Mycoses Study Group (EORTC/MSG) criteria.Whereas, Khanna et al[104] categorize 81 patients as proven IA (14.8%), probable IA (48.2%), possible IA (27.2%), or no IA (8, 9.9%) as per EORTC/MSG criteria.

Among 11 cases of sino-nasal aspergillosis, radiological findings were seen in 5 patients. Histopathological findings were observed in 3 patients that were consistent with the radiological findings. Other studies also showed correlation of histopathological findings in sino-nasal cases.[105]

The susceptibility pattern observed in 3 aspergillus isolates, 100% sensitivity was seen to voriconazole with minimum MIC of o.12 ug/ml for all aspergillus species.However, Pinto E *et al*[106] suggested 97.4% sensitivity to voriconazole in *Aspergillus fumigatus* species.

In our study, amphotericin-B showed the minimum MIC of 1ug/ml in 66.6% isolates and 33.3% shows MIC of 2ug/ml. In other study 26.5% had amphotericin b MICs of ≥2 µg/ml.[107]

Rhizopus arrhizus is the most common agent causing mucormycosis in India and globally. In the present study, among the 14 isolates of mucormycosis, most common species was *Rhizopus*(57.2%) followed by *Mucor*(42.8%).Parkash *H et al*[108] observed *Rhizopus the most common cause of mucormycosis.*

Out of total 14 cases of mucormycosis, most common infection was sino-nasal mucormycosis (57.14 %) followed by abdominal wall mucormycosis (21.43%). Out of 14 cases, Histopathology was done in 9 cases, which all were co-insiding with the culture reports. W.Jeong *et al* [43] study on clinical manifestations of mucormycosis suggested rhino-orbital-cerebral mucormycosis (ROCM) the most commonly observed manifestation(34%), followed by cutaneous (22%) and pulmonary mucormycosis(20%).

In present study among 216 patients, 142(65.74%) received antifungal treatment, most common antifungal given was voriconazole (42.95%) followed by fluconazole(34.5%). Among them 74(34.6%) did not received any antifungal treatment mostly due to delayed diagnosis which is comparable to the study by Chander J *et al*[108] which observed 55.5% patients received antifungal treatment and 44.5% did not received antifungal therapy.

Outcome was observed in terms of discharge and death. Out of 216 patients with fungal infections, 94.01% patients discharged and 5.99 % patients had fatal outcome. In a study conducted by N. Tutar *et al*, mortality was seen in 54.5% patients.[96] Tak V *et al*[109] in a study observed that, 68(43.31%) out of 157 patients had fatal outcome. Some other studies also showed high mortality rate of 30% to 70% [110]

Higher mortality is seen among old age group due to immunocompromised state. The present study showed significant relationship between age group and mortality of the patient (p=0.005). In our study, higher mortality(66.7%) was seen in elderly age group (>60 years) than younger age group(<60 years).Maximum patients who were discharged were of younger age group(71.6%). Similarly, Hirano R [110] observed higher mortality among elderly age group (33.3%) as compared to younger age group (18.1%).

Significant difference was observed in sensitivity of amphotericin-b (p=0.0008), caspofungin (0.0024) and micafungin (0.0124) among discharged and expired patients.Higher susceptibility to antifungal agents voriconazole 81%, fluconazole 74%, amphotericin-b 90.22 %, caspofungin 84.21 % and micafungin 80.45% were seen among discharged patients as compared to expired patients as agents voriconazole 67 %, fluconazole 50 %, amphotericin-b 58.3 %, caspofungin 50 % and micafungin 50 %.

In present study, variables associated with poor outcome in patients with fungal infections were positive fungal culture, higher age group, immunocompromised host conditions and resistance to antifungal agents. So, the early diagnosis of fungal infections in high-risk population is significantly important.

SUMMARY AND CONCLUSIONS

- Total samples received- 19698
- Maximum number of samples received were blood samples (78.1%) followed by body fluids (18.6%) and respiratory samples (2.4%).
- 372 (1.88%) isolates were obtained from 365 patients.
- Out of 372 isolates, 149 candida isolates obtained from respiratory and urine samples considered as colonizers and 223 were labelled as pathogens.
- 223 isolates were obtained from 216 patients.
- Maximum no. of colonizers were obtained from sputum samples (72.5%) followed by endotracheal tube aspirate (18.8%) and broncho-alveolar lavage(4.7%).
- Out of 223 isolates, 210 were from single site and 12 from multi-site.
- Detailed study was done for the patients having fungal infections (216).
- Among the colonizers, 9.4% were *Candida albicans* and 90.6 % were NAC.

  Most common species obtained in NAC was *Candida tropicalis* (49.7%) followed by *Candida stellatoidea* (37.6%)
- Fungal infections were predominant in males (65.3%) as compared to females (34.7%)
- Majority of patients belong to 51-60 years (23.1%), followed by 61-70 years (21.8%)
- Candidiasis followed by aspergillosis was most common infection observed in medicine, ICU and surgery wards.
- Most common risk factor was steroid use (21.3%) followed by diabetes mellitus (18.1%)

- Fever (65.3%) was the most common symptom observed followed by shortness of breath (41.2%) and cough (23.1%).
- Most common fungal infection was Candidiasis (60.6%) followed by Aspergillosis (29.2%) and Mucormycosis (6.0%). Among 2 cases of Trichosporon infection, 1 was trichosporonemia and other was Trichosporon pneumonia. 1 case of Fusarium keratitis was observed.
- Among 131 total candida infections, invasive candidiasis was seen in 97.7% patients & cutaneous candidiasis seen in 2.3% patients. Non-albicans candida (87.6%) was most common infection followed by *Candida albicans* (12.4%). Most common species in NAC was *Candida tropicalis* (62.7%) followed by *Candida gulliermondi* (8.7%).
- In Candida albicans 100% susceptibility was seen to Fluconazole and Echinocandins. In NAC, maximum susceptibility was seen to Amphotericin-B (89.2%) followed by Voriconazole (82.5%).
- Susceptibility to fluconazole and micafungin in *C. albicans* was statistically significant as compared to non-albicans candida.
- Higher susceptibility of voriconazole (84.4%) and amphotericn-b (93.8%) was observed in candidemia as compared to 78.4% and 81.1% respectively in body fluids.
- Susceptibility of amphotericin-b was statistically significant in candidemia as compared to candidiasis in body fluids.
- Out of 5 cryptococcus species, 4 isolates of *Cryptococcus neoformans* and 1 *Cryptococcus laurentii* was seen.
- All the 4 patients with cryptococcal meningitis were HIV reactive.
- Out of 63 cases of aspergillosis, most common infection was pulmonary aspergillosis (71.4%) followed by sino-nasal aspergillosis (19.1%).
- *Aspergillus flavus* (77.8%) was predominant species followed by *Aspergillus fumigates* (22.2%).

- Among the cases of pulmonary aspergillosis, most common radiological findings were consolidation (21.9%) and consolidation with ground glass opacity (21.9%).
- Out of 45 cases of pulmonary aspergillosis, Galactomannan assay was received in 38 patients, out of which 20 were positive. Percentage positivity of 52.6% was observed.
- According to EORTC score, on the basis of Host, Microbiological, Clinical and Histopathological criteria, there were 45 Possible, 32 Probable and no proven case was observed.
- Out of 11 cases of sino-nasal aspergillosis, histopathological findings were seen in 3 patients and were consistent with radiological findings.
- Out of total 13 cases of mucormycosis, most common infection was Sino-nasal mucormycosis (61.5 %) followed by abdominal wall mucormycosis(30.8%).Out of 13 cases, Histopathology was done in 9 cases, which all were co-insiding with the culture reports.
- Most commom species observed was *Rhizopus* (57.2%) followed by *Mucor*(42.8%)
- Among 216 patients, 143(66.2%) received antifungal treatment.
- Out of 143 patients, most commom antifungal given in candidiasis was fluconazole followed by voriconazole. In Aspergillosis, most common drug used was voriconazole. In Zygomycosis, amphotericin-b was the most commonly used antifungal.
- Out of 216 patients with fungal infections, 94.4%patients got discharged and 5.6 % expired.

CONCLUSION

Fungal infections are associated with significant morbidity and mortality. Candidiasis was the most common infection followed by aspergillosis. Candidemia is the major factor associated with fatal outcome with *Candida tropicalis*, *Candida gulliermondii* and *Candida parapsilosis* being predominant pathogens. Antifungal therapy was often started late due to difficult diagnosis of fungal infections. Antifungal susceptibility should be done for appropriate treatment. Until rapid susceptibility testing is available, empiric therapy should be used based on patients clinical condition, risk factors, site of infection and local antifungal microbiological patterns. As, fungal infections are delayed diagnosed, this poses major threat to immunocompromised individuals, increases the hospital stay and cost of medical care. So, early diagnosis and continuous surveillance of fungal infections is important for better outcome of patients.

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IMAGE1- Blood culture bottle

IMAGE 2 -Blood culture bottle for adults

IMAGE 3- Bac-T/Alert 3D microbial detection system

Ensure vials are properly seated prior to drawer closure.
Ensure vials are properly seated prior to drawer closure.
BD BACTEC™ FX

IMAGE 4– BD BACTEC-FX system

IMAGE 5- VITEK-2 COMPACT system (for yeast identification and sensitivity)

IMAGE 6–SDA with growth of *Candida spp.*

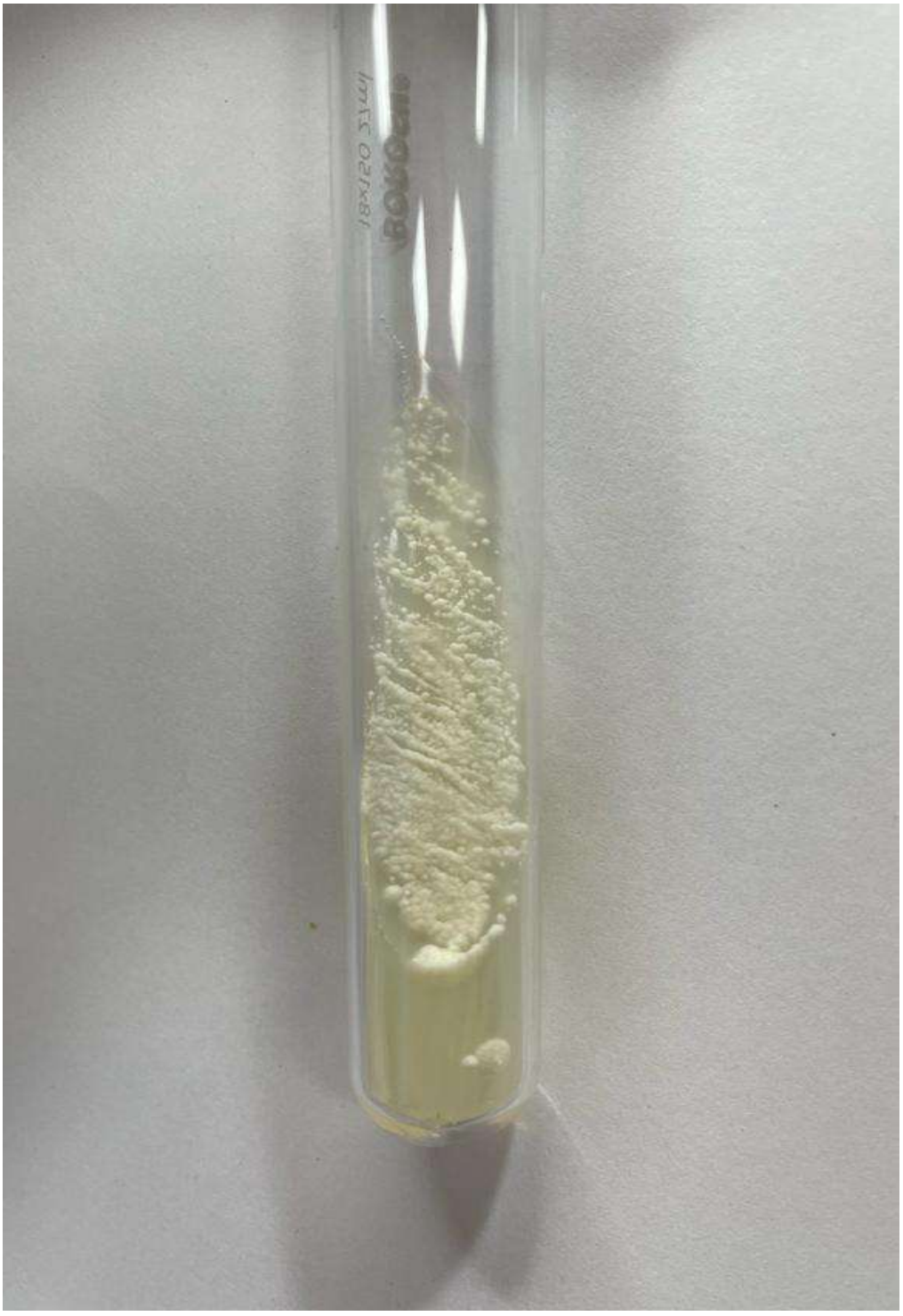

IMAGE 7- SDA with growth of *Cryptococcus spp*.

IMAGE 8 –SDA with. growth of *Aspergillus spp.*

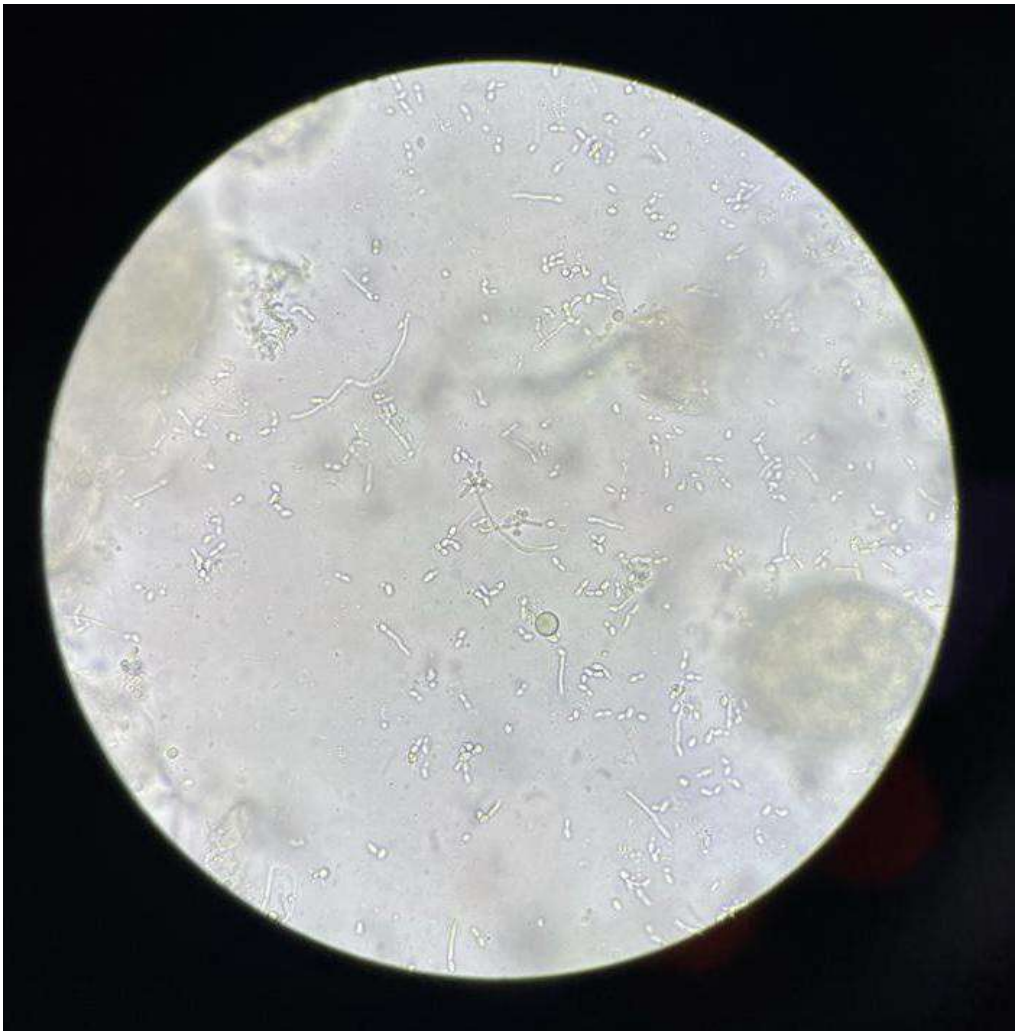

IMAGE 9- KOH Mount- Budding yeast like cells with pseudohyphae.

IMAGE 10 - KOH mount- Hyaline septate fungal hyphae.

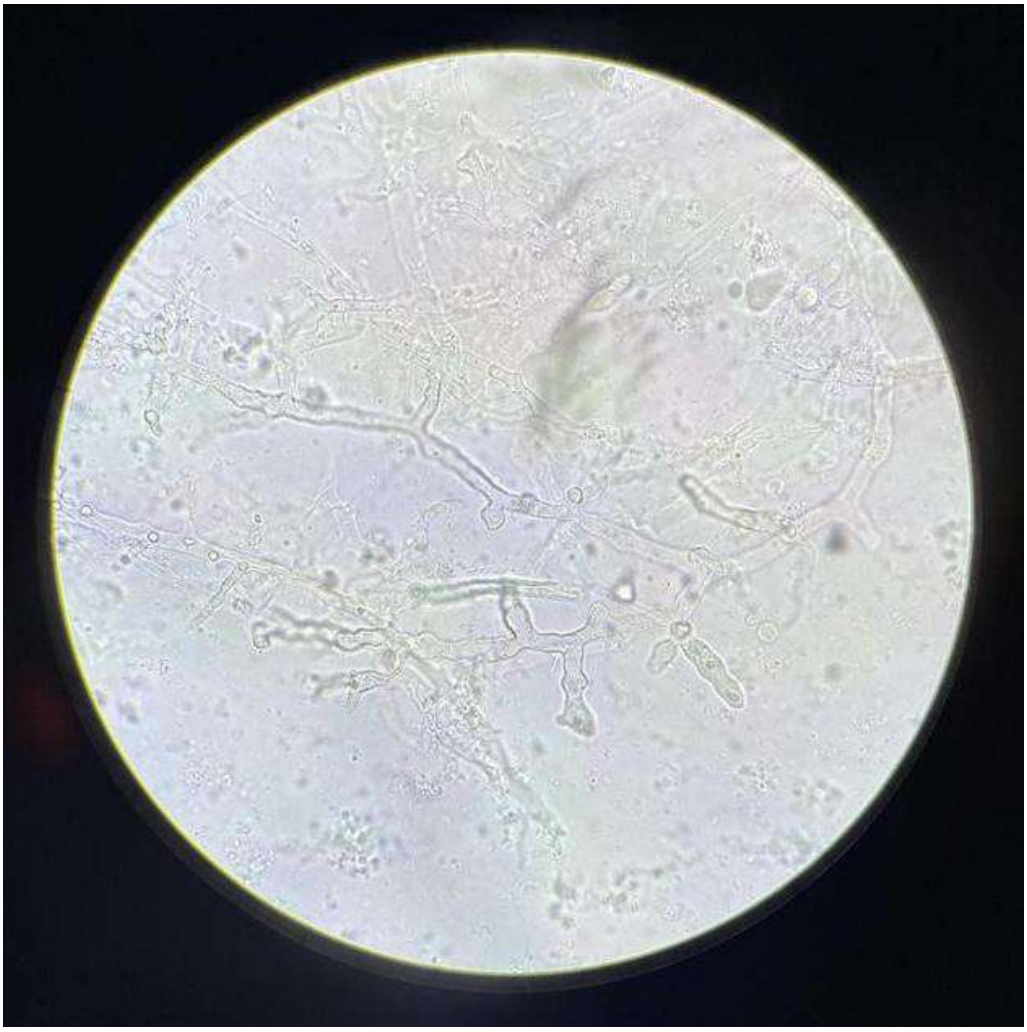

IMAGE 11-KOH mount- Broad hyaline aseptate fungal hyphae

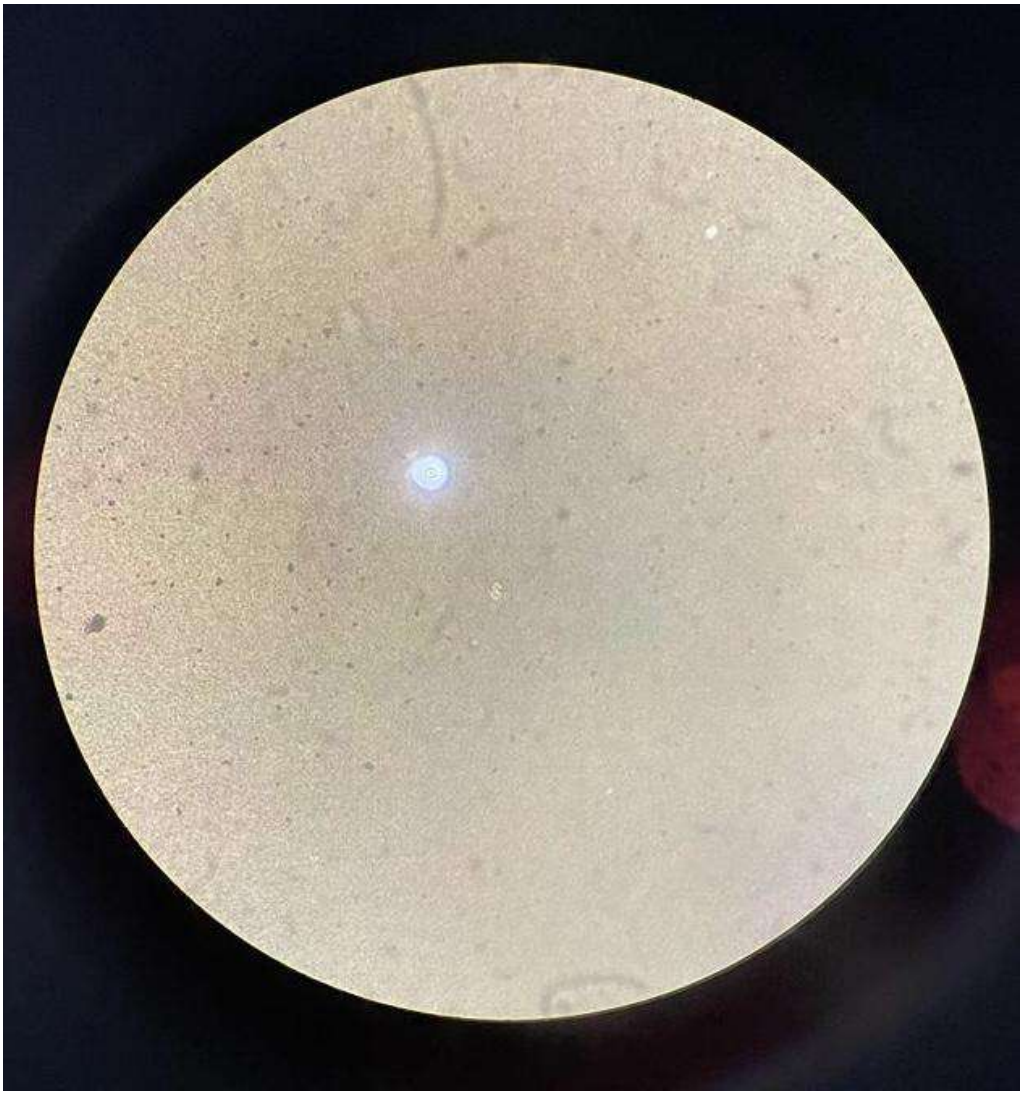

IMAGE 12-INDIA INK- Encapsulated budding yeast cellsuggestive of *Cryptococcus neoformans*

IMAGE 13- Positive Cryptococcal antigen test

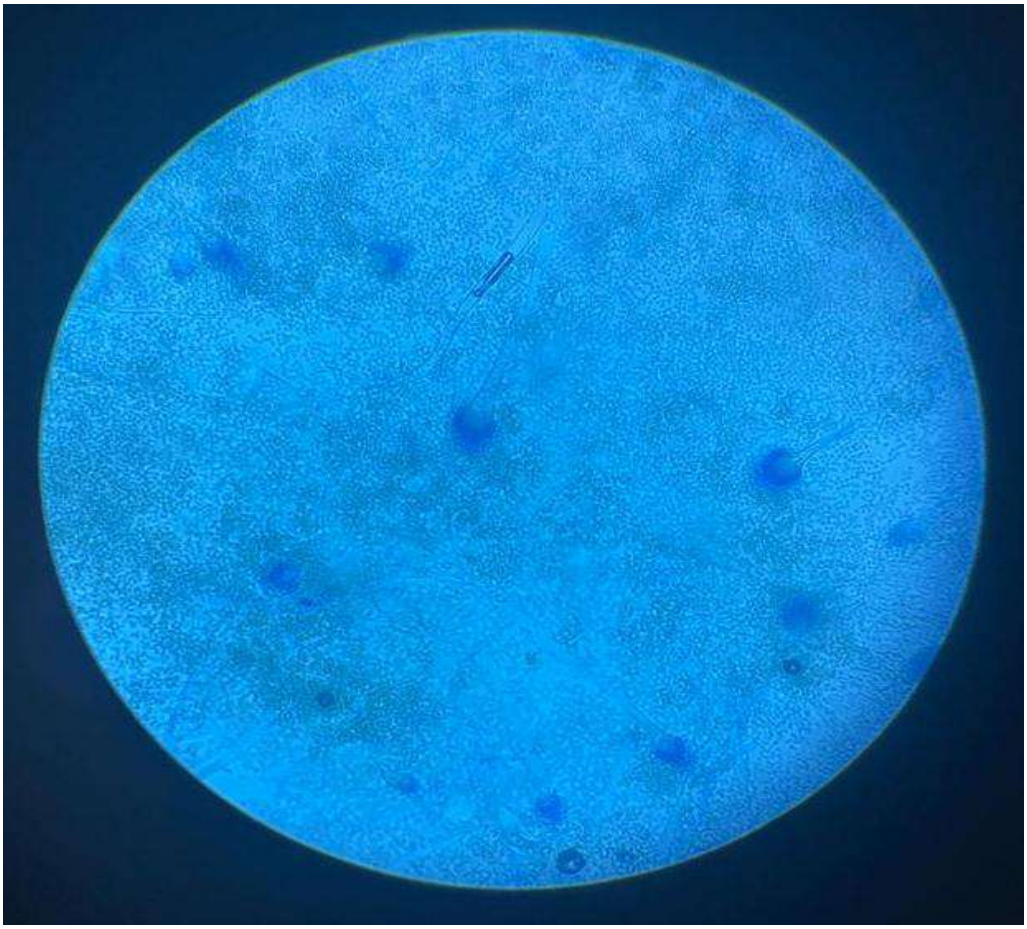

IMAGE 14- *Aspergillus flavus*on Lactophenol Cotton Blue mount, showing septate hyphae and swollen vesicle giving rise to philades from which chains of conidia arise.

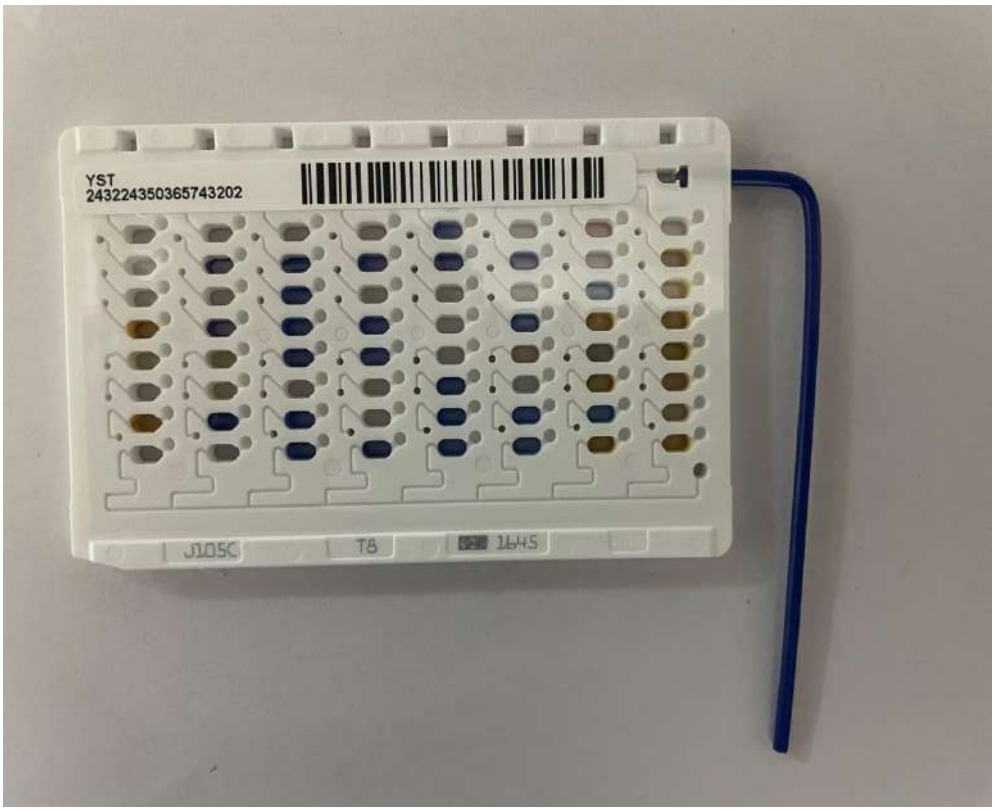

IMAGE 15 - VITEK-2 YST card for identification of yeastisolates)

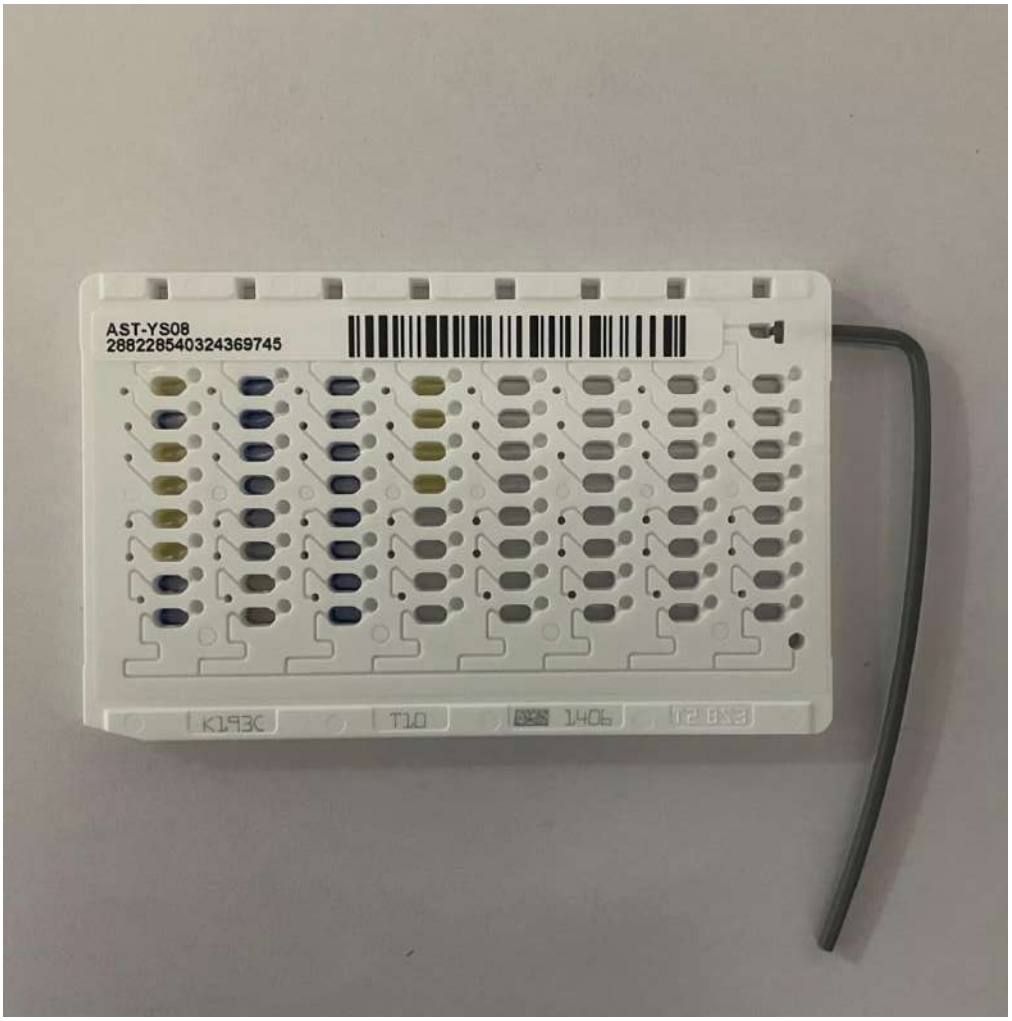

IMAGE 16 - VITEK-2 AST-YS08 (card for antifungal susceptibility testing of yeast)

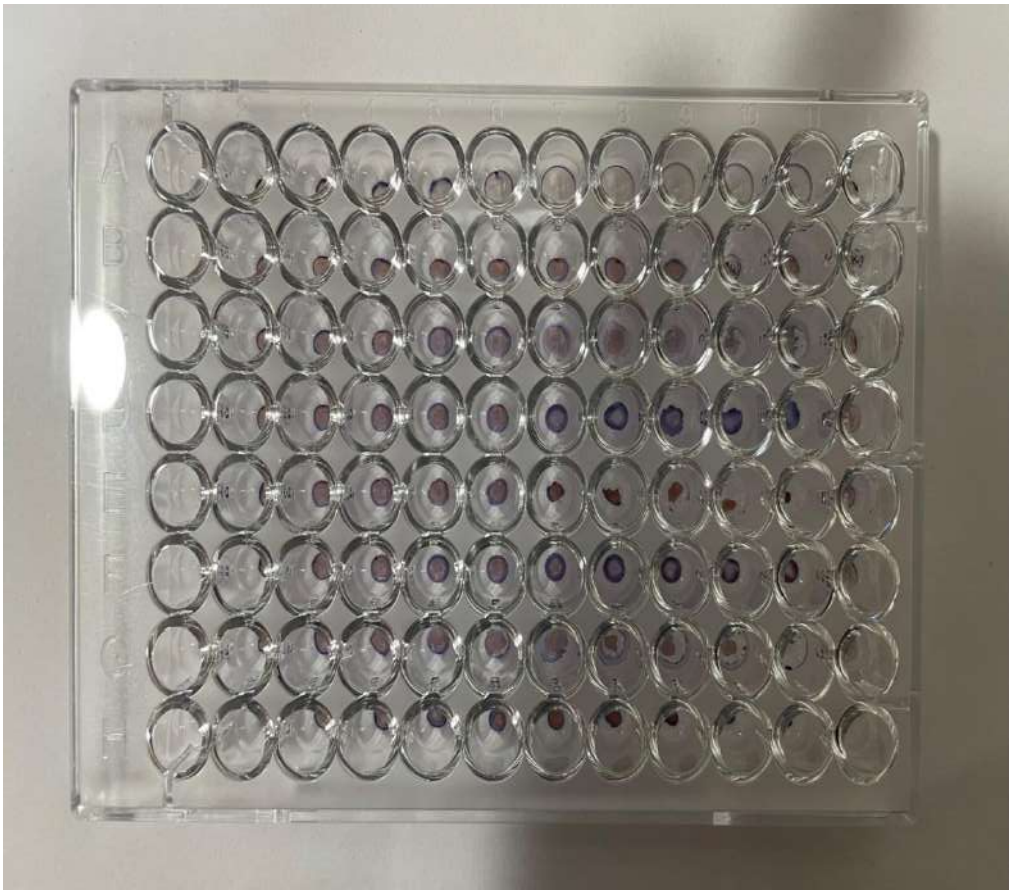

IMAGE 17- Sensititre YEASTONE plate for antifungal susceptibility for molds

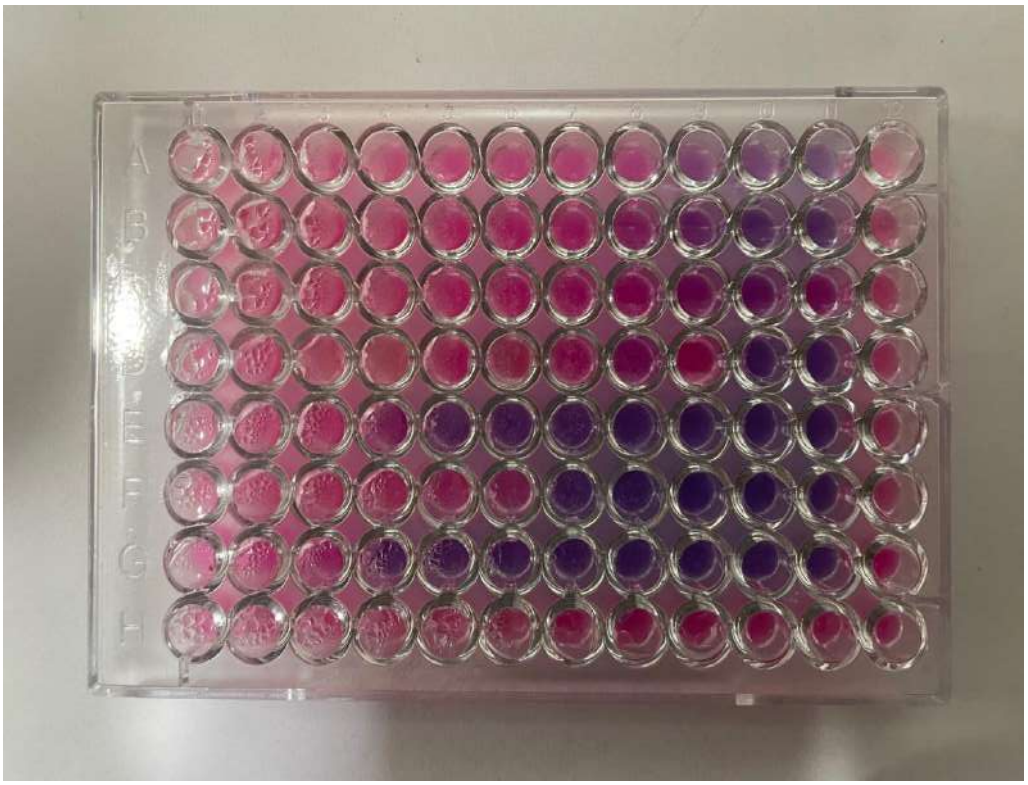

IMAGE 18- Sensititre YEASTONE plate for antifungal susceptibility for molds showing colour change

IMAGE 19- Thermo SCIENTIFIC SensititreYeastOne YO10 kit for antifungal susceptibility for molds

IMAGE 20- Reagents of 1-3 β -D-Glucan test

IMAGE 21-1-3 β -D-Glucan test plate reader

IMAGE 22- Galactomannan test plate reader

Sr No.	Name	Age	age group	Sex	Mrd No.	ADMission No.	Date of ADMission	Date of DischARge	Hospital Days	Location	Provisional Diagnosis	ChiEF Complaints	VOMITING	HYPOTHYROIDISM	NAUSEA	FEVER	SOB	PAIN ABDOMEN	COUGH WITH EXPECTORATIO	COPD
1	AK	71	7	F	1046884	2021013476	12/03/2021	19/03/2021	08	CARDIO	Anti SARs +Ve, EF 25% ,	Anti SARs +Ve, Covid Rtpcr -	N	N	N	Y	Y	N	Y	N
2	GK	64	6	M	1055906	2021014710	17/03/2021	19/03/2021	03	Chest	DM-II, LRTI, UTI	K/C/O- , Urine Frequency	N	N	N	N	Y	N	N	N
3	IR	58	5	F	1017901	2021009556	22/02/2021	03/04/2021	#VALUE!	PL-SUR	50% Flame Burn	Pt. Comes With 50%	N	N	N	N	N	N	N	N
4	HRC	81	8	M	1044183	2021012460	22/03/2021	25/03/2022	03	MEDICINE	DM, CKD LEFT Pyelonephritis	F/C/O Pyelonephritis	N	N	N	N	N	N	N	N
5	PS	60	5	M	1060343	2021015319	23/03/2021	26/03/2021	04	PCCU	Pleurial EFfusion	-	N	N	N	N	Y	Y	N	N
6	KS	56	5	M	1050992	2021013765	27/03/2021	03/04/2021	08	PCCU	DM-II, Covid Severe,	Covid+Ve On 14/03/2021	N	N	N	Y	Y	N	N	N
7	HK	63	6	M	366044	2021045896	26/03/2021	01/04/2021	07	CARDIO	POST CABG, HTN, CAD	ALETERD SENSORIUM	N	N	N	N	Y	N	N	N
8	BK	65	6	M	1073345	2021014796	02/04/2021	11/04/2021	10	MEDICINE	LRTI, AFI, DM-II, HTN	HEADACHE	N	N	N	N	Y	N	N	N
9	RWS	73	7	M	994285	2021048953	03/03/2021	06/04/2021	04	MEDICINE	HTN	ALTERED SENSORIUM	N	N	N	N	Y	N	N	N
10	JK	60	5	M	1085118	2021044965	13/04/2021	24/04/2021	12	MEDICINE	COPD, HTN, LRTI, SEPSIS	DYSPNEA	N	N	N	Y	N	N	Y	Y
11	GK	70	6	F	1089958	2021021293	19/04/2021	30/04/2021	12	PCCU	COPD, DM, POST COVID,	DYSPNEA	N	N	N	Y	Y	N	Y	Y
12	SK	54	5	M	1099430	2021022495	29/04/2021	30/04/2021	02	MEDICINE	COPD, RF	-	N	N	N	Y	Y	N	N	Y
13	SKG	73	7	M	1095880	2021021923	26/04/2021	16/05/2021	21	EMG.	Severe Covid+Ve	Covid+Ve, AG+VE	N	N	N	Y	Y	N	N	N
14	PK	60	5	M	1102441	2021023152	04/05/2021	10/05/2021	07	STROKE-ICU	HTN, SOB, LBBB	Covid-Ve, K/C/O-, LBBB,	N	N	N	N	Y	N	N	N
15	DK	50	4	F	1105609	2021023647	08/05/2021	17/05/2021	09	GEN. SUR	-	Abdominal Wall Cellulitis,	N	N	N	N	N	N	N	N
16	DK	50	4	F	1105609	2021023647	08/05/2021	17/05/2021	09	GEN. SUR	-	Abdominal Wall	N	N	N	N	N	N	N	N
17	SC	76	7	M	1044021	202104589	11/05/2021	20/05/2021	09	MEDICINE	sepsis with LRTI	-	N	N	N	N	N	N	N	N
18	BK	65	6	F	873450	2021022047	11/05/2021	21/05/2021	10	CARDIO	Dvt, CAD	Provoked Dvt, Tropt +Ve, Af,	N	N	N	Y	N	N	N	N
19	CD	70	6	F	1108181	2021024234	11/05/2021	17/05/2021	06	MEDICINE	AF, Post Covid	Covid+Ve, On Exam Atrial	N	N	N	Y	N	N	N	N
20	MK	52	5	F	1104694	2021023448	14/05/2021	21/05/2021	07	STROKE-ICU	Covid+Ve	Covid+Ve, Altered	N	N	N	Y	Y	N	N	N
21	SS	51	5	M	1101492	2021022857	15/05/2021	18/05/2021	04	MEDICINE	Post Covid	-	N	N	N	N	Y	N	N	N
22	SS	74	7	M	1109483	2021024595	16/05/2021	22/05/2021	05	MEDICINE	Covid+Ve Fungal Sepsis	-	N	N	N	N	Y	N	N	N
23	CK	65	6	F	1109250	2021024538	17/05/2021	06/07/2021	20	Chest	Post Covid With Fungal	Covid+Ve	N	Y	N	N	N	N	N	N
24	RG	49	4	M	590919	2021024934	19/05/2021	26/05/2021	08	GEN. SUR	Fungal Sepsis	-	N	N	N	N	N	N	N	N
25	KK	62	6	F	1111904	2021025409	22/05/2021	30/05/2021	09	MEDICINE	Post Covid Rhino Orbital	Headache, Nasal	N	N	N	N	N	N	N	N
26	KS	66	6	M	645488	2021024890	18/05/2021	28/05/2021	10	PCCU	HTN, DM-II, Fever,	Covid+Ve, , , ,	N	N	N	Y	Y	N	N	N
27	DG	49	4	M	1107733	2021024146	14/05/2021	28/05/2021	15	ISOLATION	Severe Covid Pneumonia,	Prior To ADMission,	N	N	N	Y	Y	N	N	N
28	MD	98	9	F	1111704	2021025305	21/05/2021	16/06/2021	27	ORTHO	Muscle Flap Repair, Sepsis,	Muscle Flap Repair, Sepsis,	N	N	N	N	N	N	N	N
29	PK	57	5	M	1101439	2021025561	21/05/2021	06/06/2021	15	MEDICINE	Post Covid, Fungal Sepsis	Covid+Ve, , , K/C/O- Ascites,	N	N	N	Y	Y	Y	N	N
30	SSS	72	7	M	1110944	2021025039	20/05/2021	27/05/2021	08	HDU	Fungal Sepsis	-	N	N	N	Y	Y	N	N	N
31		85	8	M	1109834	2021024707	17/05/2021	27/05/2021	11	MEDICINE	Rhino-Orbital, Covid+Ve,	Covid+Ve, , Headache, , ,	N	N	N	Y	N	N	N	N
32	MK	42	4	F	1112419	2021025584	23/05/2021	03/06/2021	12	MEDICINE	Post Covid Sinus	Facial Swelling, Covid+Ve	N	N	N	N	N	N	N	N
33	PK	57	5	M	1101439	2021025561	25/05/2021	06/06/2021	11	MEDICINE	Post Covid Fibnosis,	Covid+Ve	N	N	N	Y	Y	Y	N	N
34	RR	38	3	M	1113343	2021025945	26/05/2021	09/06/2021	15	EMG.	Post Covid Fungal Sepsis	Post Covid, , Septic Shock,	N	N	N	Y	Y	N	N	N

Sr No.	Name	Age	age group	Sex	Mrd No.	CKD	HTN	DIABETES	OTHER	FLU	VORI	AMPHO	CASPO	MICA	FLUCY	ITRA	Drug History	UrinARy Catheterizatio	Central Line Insertion	Respiratory Ventilation
1	AK	71	7	F	1046884	N	N	N	N	-	-	-	-	-	-	-	Tab CEFuoxime 500Mg Bd, Tab	Y	N	Y
2	GK	64	6	M	1055906	N	N	Y	N	-	-	-	-	-	-	-	Inj Plain Insulin, Rbs	Y	N	Y
3	IR	58	5	F	1017901	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
4	HRC	81	8	M	1044183	Y	N	Y	N	-	-	-	-	-	-	-	Inj Insulin, InjN Pan, Inj.	Y	N	Y
5	PS	60	5	M	1060343	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
6	KS	56	5	M	1050992	N	N	Y	N	-	-	-	-	-	-	-	N	Y	Y	Y
7	HK	63	6	M	366044	N	Y	N	N	-	-	-	-	-	-	-	N	Y	N	Y
8	BK	65	6	M	1073345	N	Y	Y	N	-	-	-	-	-	-	-	N	Y	N	N
9	RWS	73	7	M	994285	N	Y	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	N	N
10	JK	60	5	M	1085118	N	Y	N	N	-	-	-	-	-	-	-	N	Y	Y	Y
11	GK	70	6	F	1089958	N	N	Y	N	-	-	-	-	-	-	-	HUMAN INSULIN	Y	Y	Y
12	SK	54	5	M	1099430	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
13	SKG	73	7	M	1095880	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
14	PK	60	5	M	1102441	N	Y	N	N	-	-	-	-	-	-	-	Inj. Pan, Inj. Lasix, Inj.	Y	Y	Y
15	DK	50	4	F	1105609	N	N	N	N	-	-	-	-	-	-	-	Nad	Y	Y	N
16	DK	50	4	F	1105609	N	N	N	N	-	-	-	-	-	-	-	Nad	Y	Y	N
17	SC	76	7	M	1044021	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
18	BK	65	6	F	873450	N	N	N	N	-	-	-	-	-	-	-	Inj. Octreotide CAR 1NM 30	Y	N	N
19	CD	70	6	F	1108181	N	N	N	N	-	-	-	-	-	-	-	N	N	N	N
20	MK	52	5	F	1104694	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	Y
21	SS	51	5	M	1101492	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
22	SS	74	7	M	1109483	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
23	CK	65	6	F	1109250	N	Y	Y	N	-	-	-	-	-	-	-	Tab Thyroxine 50Mg Od	Y	N	Y
24	RG	49	4	M	590919	N	N	N	N	S	S	S	S	S	-	-	N	Y	Y	N
25	KK	62	6	F	1111904	N	Y	Y	N	-	-	-	-	-	-	-	N	Y	N	Y
26	KS	66	6	M	645488	N	Y	Y	N	-	-	-	-	-	-	-	Tab Dolo, Tab Amlong 25Mg,	Y	N	Y
27	DG	49	4	M	1107733	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
28	MD	98	9	F	1111704	N	Y	Y	N	S	S	S	S	S	-	-	N	Y	N	N
29	PK	57	5	M	1101439	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
30	SSS	72	7	M	1110944	N	N	N	N	-	-	-	-	-	-	-	TAB. GLYCOMET ,	N	N	N
31		85	8	M	1109834	N	Y	Y	N	-	-	-	-	-	-	-	Insulin, Inj. Ampho B, Inj.	Y	N	Y
32	MK	42	4	F	1112419	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
33	PK	57	5	M	1101439	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
34	RR	38	3	M	1113343	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	Y

Sr No.	Name	Age	age group	Sex	Mrd No.	Corticosteroid Use	Total Parental Nutrition	Peritoneal Dialysis	Underlying Co-Morbid	Diabetes Mellitus	Malignancy	HIV/AIDS	Others	No Antifungals Given	YES/NO ANTIFUNGALS	Specimen	Date	Lab id No	Radiological Findings	Direct Microscopy
1	AK	71	7	F	1046884	N	N	N	OLD TB, ANTI SARS +VE,	N	N	N	N	No Antifungals Given	N	SPUTUM	3N18N2021	140	USG CHESTN MINIMAL LEFT	BYLC
2	GK	64	6	M	1055906	N	N	N	DMNII	Y	N	N	N	FLUCONAZOLE	YES	SPUTUM	3N19N2021	142	N	BYLC
3	IR	58	5	F	1017901	N	N	N	N	Y	N	N	UsgN ChestN Mild L Pleural	N	N	TISSUE	3N23N2021	150	N	HYALINE SEPTATE
4	HRC	81	8	M	1044183	N	N	Y	RENAL FAILURE	Y	N	N	Mdct KubN FNCNO	VORICONAZOLE	YES	ET	3N25N2021	155	N	NFES
5	PS	60	5	M	1060343	N	N	N	Y	Y	N	N	PctN 3.52	INJ. VORICONAZOL	YES	ET	3N26N2021	160	N	HYALINE SEPTATE
6	KS	56	5	M	1050992	N	N	N	Y	Y	N	N	N	N	N	ET	3N28N2021	161	COVID PNEUMONIA	NFES
7	HK	63	6	M	366044	N	N	N	CAD	N	N	N	N	No Antifungals Given	N	SPUTUM	3N31N2021	164	N	BYLC
8	BK	65	6	M	1073345	N	N	N	HTN	N	N	N	N	FLUCONAZOLE	YES	SPUTUM	4N5N2021	170	N	NFES
9	RWS	73	7	M	994285	N	N	N	HTN	N	N	N	N	TAB. VORICONAZOL	YES	SPUTUM	4N6N2021	172	N	BYLC
10	JK	60	5	M	1085118	Y	N	N	COPD, HTN	N	N	N	N	VORICONAZOLE	YES	ET	4N21N2021	195	N	BYLC
11	GK	70	6	F	1089958	Y	N	N	COPD	Y	N	N	N	VORICONAZOLE	YES	ET	4N23N2021	198	N	NFES
12	SK	54	5	M	1099430	Y	N	N	N	Y	N	N	N	No Antifungals Given	N	SPUTUM	4N30N2021	205	N	NFES
13	SKG	73	7	M	1095880	Y	N	N	N	Y	N	N	CovidN19 Positive	VORICONAZOLE	YES	SPUTUM	5N6N2021	215	ANGIOGRAPHY NCORDASN6	BYLC WITH PH
14	PK	60	5	M	1102441	Y	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	5N7N2021	216	MODERATE FIBROSIS,	NFES
15	DK	50	4	F	1105609	Y	N	N	N	Y	N	N	N	INJ. AMPHONB	YES	ABDOMINAL BRUISING	5N10N2021	222	N	NFES
16	DK	50	4	F	1105609	N	N	N	N	Y	N	N	N	INJ. AMPHONB	YES	TISSUE	5N11N2021	223	N	HYALINE FUNGAL
17	SC	76	7	M	1044021	N	N	N	N	Y	N	N	N	No Antifungals Given	N	SPUTUM	5N13N2021	225	N	NFES
18	BK	65	6	F	873450	N	N	N	N	N	N	N	N	TAB FLUCONAZOLE	YES	AF	5N13N2021	227	SMALL EXRAPERITONE	NFES
19	CD	70	6	F	1108181	Y	N	N	N	Y	N	N	N	N	N	ET	5N14N2021	230	N	HYALINE FUNGAL
20	MK	52	5	F	1104694	N	N	Y	N	Y	N	N	N	N	N	ET	5N15N2021	231	N	NFES
21	SS	51	5	M	1101492	N	N	N	N	Y	N	N	N	N	N	ET	5N17N2021	234	ARDS WITH SUPERADED	ASPETATE FUNGAL
22	SS	74	7	M	1109483	Y	N	N	N	Y	N	N	N	N	N	NASAL SWAB	5N17N2021	235	mri pansinusitis	NFES
23	CK	65	6	F	1109250	N	Y	N	N	N	N	N	N	FLUCONAZOLE	YES	SPUTUM	5N19N2021	243	ORGANIZING PNEUMONIA	NFES
24	RG	49	4	M	590919	Y	N	N	N	N	N	N	N	TAB FLUCONAZOLE	YES	TISSUE	21N05N2021	250	N	NFES
25	KK	62	6	F	1111904	N	N	N	HTN	Y	N	N	N	INJ. VORICONAZOL	YES	TISSUE	22N05N2021	256	PNEUMONIA WITH	HYALINE ASEPTATE+SEP
26	KS	66	6	M	645488	N	N	N	HTN	Y	N	N	N	FLUCONAZOLE	YES	SPUTUM	23N05N2021	263	MODERATE POST COVID	BYLC WITH PH
27	DG	49	4	M	1107733	N	N	N	HTN	N	N	N	N	FLUCONAZOLE	YES	SPUTUM	23N05N2021	265	CORADSNVI (CT SCORE	BYLC WITH PH
28	MD	98	9	F	1111704	N	N	N	HTN	Y	N	N	N	N	N	TISSUE	5N24N2021	267	N	BYLC WITH PH
29	PK	57	5	M	1101439	N	N	N	N	N	N	N	N	INJ. VORICONAZOL	YES	SPUTUM	5N24N2021	269	COVIDN19 PNEUMONIA,	NFES
30	SSS	72	7	M	1110944	N	N	N	N	N	N	N	N	N	N	ET	5N24N2021	270	N	BYLC WITH PH
31		85	8	M	1109834	Y	N	N	HTN	Y	N	N	N	INJ. AMPHO B	YES	NASAL SCRAPING	5N25N2021	272	ORBITAL CELLULITIS	HYALINE FUNGAL
32	MK	42	4	F	1112419	N	N	N	N	N	N	N	N	INJ. VORICONAZOL	YES	NASAL SCRAPING	5N26N2021	276	MUCOSAL HYPERTROPHY	NFES
33	PK	57	5	M	1101439	N	N	N	N	N	N	N	N	INJ. VORICONAZOL	YES	SPUTUM	5N27N2021	281	FIBROSIS (L>R) IN BNL LUNGS	NFES
34	RR	38	3	M	1113343	N	N	N	N	N	N	N	N	INJ. VORICONAZOL	YES	NASAL SCRAPING	5N27N2021	282	LEFT ORBITAL SUNUSIS, LEFT	BYLC WITH PH+ HYALINE

Sr No.	Name	Age	age group	Sex	Mrd No.	India Ink PrepARation	Latex AGglUTInation	Culture	POSA	Antifungal Susceptibility	1-3-beta-Glucan-Essay	FUNGITELL	GALACTOMANNAN		Galacto Mannan	Outcome
1	AK	71	7	F	1046884	-	-	Candida Tropicalis	-	-	-	-	POS	0.59 POS	POS	PATIENT DISCHARGED
2	GK	64	6	M	1055906	-	-	Candida Tropicalis	-	-	NEG	NEG	NEG	0.48 NEG	NEG	PATIENT DISCHARGED
3	IR	58	5	F	1017901	-	-	Aspergillus flavus	-	PATIENT EXPIRED	POS	POS	NEG	0.42 NEG	NEG	PATIENT EXPIRED
4	HRC	81	8	M	1044183	-	-	Candida Tropicalis	-	-	INDETERMINATE	INDETERMINATE	POS	0.78 POS	POS	PATIENT DISCHARGED
5	PS	60	5	M	1060343	-	-	Aspergillus fumigatus	-	NOT DONE AS PATIENT	POS	POS	POS	0.66 POS	POS	PATIENT DISCHARGED
6	KS	56	5	M	1050992	-	-	Aspergillus flavus	-	NOT DONE AS PATIENT	INDETERMINATE	INDETERMINATE	NEG	0.33 NEG (28/03/2021),	POS	PATIENT DISCHARGED
7	HK	63	6	M	366044	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
8	BK	65	6	M	1073345	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
9	RWS	73	7	M	994285	-	-	Aspergillus fumigatus	-	-	POS	POS	NEG	0.39-NEG	NEG	PATIENT DISCHARGED
10	JK	60	5	M	1085118	-	-	C. Stellatoidea	-	-	NEG	NEG	NEG	0.11NEG	NEG	PATIENT DISCHARGED
11	GK	70	6	F	1089958	-	-	C. Stellatoidea	-	-	POS	POS	POS	0.8POS	POS	PATIENT DISCHARGED
12	SK	54	5	M	1099430	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
13	SKG	73	7	M	1095880	-	-	Candida Tropicalis	-	-	POS	POS	NEG	0.14 NEG	NEG	PATIENT DISCHARGED
14	PK	60	5	M	1102441	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
15	DK	50	4	F	1105609	-	-	Mucor	-	-						PATIENT EXPIRED
16	DK	50	4	F	1105609	-	-	Mucor	-	-						PATIENT EXPIRED
17	SC	76	7	M	1044021	-	-	C. Stellatoidea	-	-	-	-	POS	0.65 POS	POS	PATIENT DISCHARGED
18	BK	65	6	F	873450	-	-	Candida ciferrii	-	-	POS	POS	NEG	0.48 NEG	NEG	PATIENT DISCHARGED
19	CD	70	6	F	1108181	-	-	Aspergillus flavus	-	-			POS	2.33 POS	POS	PATIENT EXPIRED
20	MK	52	5	F	1104694	-	-	Aspergillus flavus	-	-			POS	0.52 POS	POS	PATIENT DISCHARGED
21	SS	51	5	M	1101492	-	-	TrIchosporon Species	-	-			NEG	0.36 NEG	NEG	PATIENT DISCHARGED
22	SS	74	7	M	1109483	-	-	Aspergillus flavus	-	-			NEG	0.06 NEG	NEG	PATIENT DISCHARGED
23	CK	65	6	F	1109250	-	-	C. Stellatoidea	-	-	-	-	NEG	0.21 NEG	NEG	PATIENT DISCHARGED
24	RG	49	4	M	590919	-	-	Candida Gullermondi	-	FLU-S, VORI-S, AMPHO-S,						PATIENT DISCHARGED
25	KK	62	6	F	1111904	-	-	Rhizopus	-	-						PATIENT DISCHARGED
26	KS	66	6	M	645488	-	-	Candida Tropicalis	-	-	POS	POS	POS	1.58 POS	POS	PATIENT DISCHARGED
27	DG	49	4	M	1107733	-	-	Candida Tropicalis	-	-	POS	POS	POS	0.80 POS	POS	PATIENT DISCHARGED
28	MD	98	9	F	1111704	-	-	Candida Tropicalis	-	FLU-S, VORI-S, AMPHO-S,			POS	0.89 POS	POS	PATIENT DISCHARGED
29	PK	57	5	M	1101439	-	-	Aspergillus flavus	-	-	POS	POS	NEG	0.27 NEG	NEG	PATIENT DISCHARGED
30	SSS	72	7	M	1110944	-	-	Aspergillus flavus	-	-	POS	POS	POS	2.03 POS	POS	PATIENT DISCHARGED
31		85	8	M	1109834	-	-	Rhizopus	-	-			POS	0.95 POS	POS	PATIENT DISCHARGED
32	MK	42	4	F	1112419	-	-	Aspergillus flavus	-	-			POS	0.55 POS	POS	PATIENT DISCHARGED
33	PK	57	5	M	1101439	-	-	Aspergillus flavus	-	PATIENT RESPONDED	POS	POS	NEG	0.17 NEG	NEG	PATIENT DISCHARGED
34	RR	38	3	M	1113343	-	-	Rhizopus	-	-			POS	1.17 POS	POS	PATIENT DISCHARGED

Sr No.	Name	Age	age group	Sex	Mrd No.	ADMission No.	Date of ADMission	Date of DischARge	Hospital Days	Location	Provisional Diagnosis	ChiEF Complaints	VOMITING	HYPOTHYROIDISM	NAUSEA	FEVER	SOB	PAIN ABDOMEN	COUGH WITH EXPECTORATIO	COPD
35	AS	68	6	M	1113630	2021026070	26/05/2021	05/06/2021	11	MEDICINE	Post Covid, LEFt Orbital	Post Covid, LEFt Eye Pain, ,	N	N	N	Y	N	N	N	N
36	NK	54	5	F	1114017	2021026208	27/05/2021	03/06/2021	08	TRAUMA-ICU	Post Covid Fungal Sepsis	Covid+Ve, K/C/O-, Chest	N	N	N	N	N	N	N	N
37	GS	34	3	M	1113700	2021026084	28/05/2021	1/62021	04	GASTRO	Post Covid	DiAGnostic Nasal	N	N	N	N	N	N	N	N
38	HR	69	6	M	1108207	2021024238	13/05/2021	30/05/2021	18	MED. ICU	HTN, DM-II, FUNGAL	-	N	N	N	Y	Y	Y	N	N
39	GS	34	3	M	1113700	2021026084	01/06/2021	04/06/2021	03	GASTRO	Post Covid, Right Rhino	Right Eye Pain, Covid+Ve,	N	N	N	N	N	N	N	N
40	RR	38	3	M	1113343	2021025945	29/05/2021	09/06/2021	12	EMG.	Covid+Ve, Fungal Sepsis,	Covid+Ve, Headache,	N	N	N	N	N	N	N	N
41	TL	73	7	M	1112811	2021025750	28/05/2021	03/06/2021	06	Chest	DM-II, Covid+Ve	-	N	N	N	N	Y	N	Y	N
42	KD	59	5	F	1108729	2021024404	28/05/2021	07/06/2021	11	GEN. SUR	Post Covid	, Ascites,	N	N	N	N	Y	Y	N	N
43	SR	69	6	F	1112375	2021025563	29/05/2021	02/06/2021	05	HDU	Post Covid, Fungal Sepsis,	Headache, , Covid+Ve	N	N	N	N	Y	N	N	N
44	BK	50	4	F	1113341	2021025942	25/05/2021	29/06/2021	05	NEURO	DM-II, INVOLUNTARY	INVOLUNTARY FUNCTIONAL	N	N	N	Y	Y	N	N	N
45	SSB	54	5	M	1109251	2021024539	16/05/2021	31/05/2021	16	ORTHO	Covid+Ve, UTI, DM-II	-	N	N	N	Y	N	Y	N	N
46	GK	65	6	F	1113930	2021026180	28/05/2021	05/06/2021	09	HDU	ARds, Covid +Ve, Mild MR,	R/O-Embolism	N	N	N	Y	Y	N	N	N
47	MM	47	4	F	1114137	2021026242	29/05/2021	03/06/2021	06	ISOLATION	Covid+Ve	-	N	N	N	N	Y	N	N	N
48	MP	59	5	F	1115050	2021026624	30/05/2021	10/06/2021	12	GASTRO	Post Covid, DM-II	K/C/O-, Post Covid, LEFt Eye	N	N	N	N	N	N	N	N
49	SK	86	8	F	1115483	2021026815	31/05/2021	10/06/2021	10	PCCU	Post Covid Fibrosis, Type-I	-	N	N	N	Y	Y	N	Y	N
50	MP	59	5	F	1115050	2021026624	30/05/2021	10/06/2021	12	GASTRO	UTI, SEPSIS, DM-II, FUNGAL	-	N	N	N	Y	Y	Y	N	N
51	SC	68	6	M	1113723	2021026102	30/06/2021	05/06/2021	06	MED. ICU	HTN, CVA, Post Covid	K/C/O-, Old CVA.	N	N	N	Y	Y	N	N	N
52	GS	52	5	M	545302	2021027461	01/06/2021	04/06/2021	03	ENT	AFI, SEPSIS, HTN,	-	N	N	N	Y	Y	N	N	N
53	KC	98	9	M	295360	2021027258	03/06/2021	14/06/2021	11	CARDIO	LRTI With Type II RF	Generalized Weakness	N	N	N	N	N	N	N	N
54	ZS	74	7	M	319009	2021027218	02/06/2021	08/06/2021	07	CARDIO	HTN, 1Av, Post AVR	, Loss Of Appetite,	N	N	N	Y	N	N	N	N
55	GS	57	5	M	1115925	2021027000	01/06/2021	02/07/2021	01	HDU	FUNGAL SEPSIS, DM-II	-	N	N	N	Y	Y	N	Y	N
56	T	3	0	M	1115500	2021026834	31/05/2021	15/06/2021	16	NS-ICU	SMOKE INHALATION	SMOKE INHALATION	N	N	N	N	Y	N	N	N
57	HS	65	6	M	1119943	2021028165	10/06/2021	20/06/2021	11	MEDICINE	AFI, LRTI, SEPSIS	-	N	N	N	Y	Y	N	Y	N
58	RG	79	7	M	1120303	2021028313	09/06/2021	22/06/2022	13	MEDICINE	AFI,FUNGAL SEPSIS	FATIGUE,FEVER,RESTLESSNES	N	N	N	N	N	N	N	N
59	IS	54	5	M	1119818	2021028120	08/06/2021	24/06/2021	17	PCCU	AFI,FUNGAL SEPSIS	FEVER, EXCESSIVE	N	N	N	N	N	N	N	N
60	JK	51	5	F	1121365	2021031690	11/06/2021	23/06/2021	13	DUMRA-ISO	AFI,COVID +, SEPSIS	COUGH, SOB,FEVER	N	N	N	N	N	N	N	N
61	SS	60	5	M	27222	2021029021	13/06/2021	24/06/2021	12	ISOLATION	Covid Pneumonia,	Chest Pain	N	N	N	Y	N	N	Y	N
62	SK	65	6	F	1122338	2021029238	15/06/2021	19/06/2021	05	MEDICINE	DM-II, HTN, Covid+Ve	-	N	N	N	Y	Y	N	N	N
63	VK	59	5	M	75407	2021028577	10/06/2021	24/06/2021	14	CARDIO	DM-II, CAD, Post PTC To	Presented With	N	N	N	N	N	N	N	N
64	GS	68	6	M	1124201	2021029977	18/06/2021	10/07/2021	23	MEDICINE	DM-II, HTN, Post Covid,	, K/C/O-, , Chest	N	N	N	Y	N	N	N	N
65	RK	39	3	F	1244551	11-06-2021	18/06/2021	26/06/2021	09	Chest	Post Covid, ARds, Fungal	Covid+Ve	N	N	N	Y	Y	N	Y	N
66	KK	51	5	F	1121751	2021028916	06/12/2021	25/12/2021	19	HDU	Type-I RF, Post Covid, Fungal	Generalized Body	N	N	N	Y	Y	N	N	N
67	NK	55	5	F	1123912	2021029893	17/06/2021	25/06/2021	09	MEDICINE	DM-II, HTN, Post Covid,	K/C/O-Post Covid, Right	N	N	N	Y	Y	N	Y	N
68	GKS	61	6	F	1124961	2021030284	19/06/2021	05/07/2021	17	HDU	Severe Covid, Fungal Sepsis,	Body Weakness	N	N	N	Y	Y	N	N	N
69	DGS	58	5	M	142752	2021031846	20/06/2021	01/07/2021	11	GASTRO	CLD, DM-II	-	N	N	N	N	N	Y	N	N

Sr No.	Name	Age	age group	Sex	Mrd No.	CKD	HTN	DIABETES	OTHER	FLU	VORI	AMPHO	CASPO	MICA	FLUCY	ITRA	Drug History	UrinARy Catheterizatio	Central Line Insertion	Respiratory Ventilation
35	AS	68	6	M	1113630	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
36	NK	54	5	F	1114017	N	N	Y	N	-	-	-	-	-	-	-	Bp Monitoring, Rbs	Y	N	Y
37	GS	34	3	M	1113700	N	N	N	N	-	-	-	-	-	-	-	Y	N	Y	N
38	HR	69	6	M	1108207	Y	Y	Y	N	-	-	-	-	-	-	-	N	Y	N	N
39	GS	34	3	M	1113700	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
40	RR	38	3	M	1113343	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
41	TL	73	7	M	1112811	N	N	Y	N	-	-	-	-	-	-	-	N	Y	Y	Y
42	KD	59	5	F	1108729	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	Y
43	SR	69	6	F	1112375	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
44	BK	50	4	F	1113341	N	N	N	N	-	-	-	-	-	-	-	TAB. GLIMIPRIDE	Y	N	Y
45	SSB	54	5	M	1109251	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
46	GK	65	6	F	1113930	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
47	MM	47	4	F	1114137	N	N	N	N	-	-	-	-	-	-	-	Tab. Amalong Mt 25Mg Od	Y	N	Y
48	MP	59	5	F	1115050	N	N	Y	N	-	-	-	-	-	-	-	Inj. Tazact 4.5Gm, Inj.	Y	N	Y
49	SK	86	8	F	1115483	N	N	N	N	-	-	-	-	-	-	-	Inj. Tazact 4.5Gm, Inj.	Y	N	Y
50	MP	59	5	F	1115050	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
51	SC	68	6	M	1113723	N	Y	N	N	-	-	-	-	-	-	-	Inj. NorNEpi, Tab	Y	Y	Y
52	GS	52	5	M	545302	N	Y	N	N	-	-	-	-	-	-	-	N	Y	N	N
53	KC	98	9	M	295360	N	N	N	N	-	-	-	-	-	-	-	Cap EcospriNAv,	Y	Y	Y
54	ZS	74	7	M	319009	N	Y	N	N	-	-	-	-	-	-	-	Tab CEFuoxime 500Mg Bd	Y	Y	Y
55	GS	57	5	M	1115925	N	N	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET	Y	N	Y
56	T	3	0	M	1115500	N	N	N	N	S	S	S	S	S	S	-	N	Y	Y	Y
57	HS	65	6	M	1119943	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	N
58	RG	79	7	M	1120303	N	N	N	N	-	-	-	-	-	-	-	N	N	N	N
59	IS	54	5	M	1119818	N	N	N	N	-	-	-	-	-	-	-	N	N	N	N
60	JK	51	5	F	1121365	N	N	N	N	-	-	-	-	-	-	-	N	N	N	N
61	SS	60	5	M	27222	N	Y	Y	N	-	-	-	-	-	-	-	Tab Glycomet GpiN500 Od,	Y	N	Y
62	SK	65	6	F	1122338	N	Y	Y	N	-	-	-	-	-	-	-	Tab. Glycomet 1 Od, Tab.	Y	N	Y
63	VK	59	5	M	75407	N	N	Y	N	-	-	-	-	-	-	-	Tab Isolazine 1N2 Tab Bd,	Y	Y	Y
64	GS	68	6	M	1124201	N	Y	Y	N	-	-	-	-	-	-	-	Urimax, Tab Glimesave	Y	N	Y
65	RK	39	3	F	1244551	N	N	Y	N	-	-	-	-	-	-	-	Inj. Plain Insulin	Y	Y	Y
66	KK	51	5	F	1121751	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
67	NK	55	5	F	1123912	N	Y	Y	N	-	-	-	-	-	-	-	Tab. Amalong 5Mg Od, Tab.	Y	N	Y
68	GKS	61	6	F	1124961	N	N	Y	N	-	-	-	-	-	-	-	Inj. Human MixtARd, Tab.	Y	N	Y
69	DGS	58	5	M	142752	N	N	Y	N	-	-	-	-	-	-	-	N	Y	N	Y

Sr No.	Name	Age	age group	Sex	Mrd No.	Corticosteroid Use	Total Parental Nutrition	Peritoneal Dialysis	Underlying Co-Morbid	Diabetes Mellitus	Malignancy	HIV/AIDS	Others	No Antifungals Given	YES/NO ANTIFUNGALS	Specimen	Date	Lab id No	Radiological Findings	Direct Microscopy
35	AS	68	6	M	1113630	N	N	N	HTN	Y	N	N	N	INJ. AMPHO B	YES	NASAL SCRAPING	5N27N2021	283	GROUND GLASS	NFES
36	NK	54	5	F	1114017	N	N	N	N	Y	N	N	N	INJ. VORICONAZOL	YES	NASAL MUCOCA	5N27N2021	288	BNL PNE (L>R) SNO	HYALINE SEPTATE
37	GS	34	3	M	1113700	N	N	N	N	N	N	N	N	N	N	TISSUE	5N28N2021	290	HRCT CHESTNCORAS	HYALINE SEPTATE
38	HR	69	6	M	1108207	N	N	N	HTN, CKD	Y	N	N	N	TAB, VORICONAZOL	YES	ET	5N28N2021	292	N	NFES
39	GS	34	3	M	1113700	Y	N	N	N	N	N	N	N	INJ. VORICONAZOL	YES	NASAL SCRAPING	5N28N2021	294	HRCT CHESTN SEQUELAE OF	HYALINE SEPTATE
40	RR	38	3	M	1113343	Y	N	N	N	N	N	N	N	INJ. AMPHONB	YES	DEBRIS SINUS	5N28N2021	296	CT SCAN PNSN RIGHT SIDED	ASEPTATE+SEPTATE FUNGAL
41	TL	73	7	M	1112811	Y	N	N	N	Y	N	N	N	No Antifungals Given	N	SPUTUM	5N28N2021	297	HRCT CHESTN FOCAL	BYLC WITH PH
42	KD	59	5	F	1108729	N	N	N	N	N	N	N	N	No Antifungals Given	N	ET	5N29N2021	300	N	NFES
43	SR	69	6	F	1112375	N	N	N	N	Y	N	N	N	INJ. ISAVUCONAZO	YES	ET	5N29N2021	304	HRCT CHESTN CORADSNV	BYLC WITH PH
44	BK	50	4	F	1113341	Y	N	N	N	Y	N	N	N	TAB. VORICONAZOL	YES	SINO NASAL MUCOSA	5N30N2021	308	N	ASPETATE FUNGAL
45	SSB	54	5	M	1109251	Y	N	N	N	Y	N	N	N	TAB. ISAVUCONAZO	YES	ET	5N30N2021	309	N	BYLC WITH PH
46	GK	65	6	F	1113930	Y	N	N	ARDS	N	N	N	N	TAB. VORICONAZOL	YES	SPUTUM	5N31N2021	310	CT SCAN PULM.	BYLC WITH PH
47	MM	47	4	F	1114137	N	N	N	HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	6N1N2021	312	ACUTE PULM EMBOLISM,	BYLC WITH PH
48	MP	59	5	F	1115050	N	N	N	POST COVID	Y	N	N	N	INJ. POSACONAZOL	YES	NASAL SCRAPING	6N1N2021	314	HYPER DEVERE CONTENTS IN	ASPETATE FUNGAL
49	SK	86	8	F	1115483	Y	N	N	KNCNONCLL	N	Y	N	N	POSACONAZOLE	YES	SPUTUM	6N3N2021	319	HRCT CHESTN SNO	BYLC WITH PH
50	MP	59	5	F	1115050	N	N	N	N	Y	N	N	N	TAB. VORICONAZOL	YES	NASAL MUCOCA	6N4N2021	324	N	ASPETATE FUNGAL
51	SC	68	6	M	1113723	Y	Y	N	HTN, OLD CVA	N	N	N	N	INJ. VORICONAZOL	YES	ET	6N4N2021	325	N	BYLC WITH PH+ HYALINE
52	GS	52	5	M	545302	N	N	N	HTN	N	N	N	BNCN No Growth	TAB, VORICONAZOL	YES	SPUTUM	6N4N2021	326	N	ASEPTATE+SEPTATE FUNGAL
53	KC	98	9	M	295360	N	N	N	CAD	N	N	N	N	No Antifungals Given	N	SPUTUM	6N4N2021	330	USG WHOLE ABDOMENN	NFES
54	ZS	74	7	M	319009	N	N	N	HTN, HEART DS	N	N	N	N	No Antifungals Given	N	SPUTUM	6N5N2021	331	HRCT CHESTN CORADSNV	NFES
55	GS	57	5	M	1115925	Y	N	N	N	Y	N	N	BNCN STAPH. HAEMOLYTICU	TAB. VORICONAZOL	YES	SPUTUM	6N6N2021	335	N	NFES
56	T	3	0	M	1115500	N	N	N	N	N	N	N	BNCN No Growth	FLUCONAZOLE	YES	BAL	6N6N2021	337	N	BYLC WITH PH
57	HS	65	6	M	1119943	Y	N	N	N	N	N	N	N	N	N	SPUTUM	6N11N2021	349	N	NFES
58	RG	79	7	M	1120303	N	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	6N13N2021	356	N	BYLC WITH PH
59	IS	54	5	M	1119818	N	N	N	N	N	N	N	N	N	N	SPUTUM	6N13N2021	357	N	BYLC WITH PH
60	JK	51	5	F	1121365	N	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	6N14N2021	361	N	BYLC WITH PH
61	SS	60	5	M	27222	Y	N	N	HTN	Y	N	N	N	VORICONAZOLE	YES	SPUTUM	6N15N2021	365	HRCT CHESTN THICK WALL	BYLC WITH PH
62	SK	65	6	F	1122338	Y	N	N	HTN	Y	N	N	EchoNLvEF=60 %, Mild Tr C	INJ. VORICONAZOL	YES	CHEST FLUID	6N15N2021	367	MILDNMODERATE BNL	NFES
63	VK	59	5	M	75407	Y	N	N	CAD, HTN	Y	N	N	N	N	N	PUS	6N16N2021	368	N	NFES
64	GS	68	6	M	1124201	N	N	N	HTN, POST COVID	Y	N	N	N	AMPHOTERICIN-B ,	YES	SPUTUM	6N19N2021	378	N	NFES
65	RK	39	3	F	1244551	N	Y	N	SEPSIS, SHOCK	Y	N	N	N	TAB. VORICONAZOL	YES	SPUTUM	6N20N2021	384	CT SCAN PULM.	NFES
66	KK	51	5	F	1121751	N	N	N	COVID+VE	N	N	N	N	VORICONAZOLE	YES	SPUTUM	6N22N2021	387	HRCT CHESTNCORAD	BYLC WITH PH
67	NK	55	5	F	1123912	N	N	N	HTN	Y	N	N	N	AMPHONB	YES	DEBRIS SINUS	6N22N2021	389	CT PNSNBNL FUNGAL	HYALINE ASEPTATT
68	GKS	61	6	F	1124961	N	N	N	TYPENI RF	Y	N	N	N	VORICONAZOLE	YES	SPUTUM	7N1N2021	407	HRCT CHESTNCORAD	BYLC WITH PH
69	DGS	58	5	M	142752	N	N	N	N	Y	N	N	N	FLUCONAZOLE	YES	SPUTUM	7N5N2021	412	HRCT CHESTN RIGHT	NFES

Sr No.	Name	Age	age group	Sex	Mrd No.	India Ink PrepARation	Latex AGglUTInation	Culture	POSA	Antifungal Susceptibility	1-3-beta-Glucan-Essay	FUNGITELL	GALACTOMANNAN		Galacto Mannan	Outcome
35	AS	68	6	M	1113630	-	-	Mucor	-	-						PATIENT DISCHARGED
36	NK	54	5	F	1114017	-	-	Aspergillus flavus	-	-			NEG	0.34 NEG	NEG	PATIENT DISCHARGED
37	GS	34	3	M	1113700	-	-	Aspergillus flavus	-	-						PATIENT DISCHARGED
38	HR	69	6	M	1108207	-	-	Aspergillus flavus	-	PATIENT GOT DISCHARGED	POS	POS	NEG	0.45 NEG	NEG	DAMA
39	GS	34	3	M	1113700	-	-	Aspergillus flavus	-	-						DISCHARGE AT REQUEST
40	RR	38	3	M	1113343	-	-	Rhizopus	-	-			POS	1.17 POS	POS	PATIENT DISCHARGED
41	TL	73	7	M	1112811	-	-	Candida Tropicalis	-	-	-	-	NEG	0.15 NEG	NEG	PATIENT DISCHARGED
42	KD	59	5	F	1108729	-	-	Candida Tropicalis	-	-	POS	POS	NEG	0.27 NEG	NEG	DAMA
43	SR	69	6	F	1112375	-	-	Aspergillus flavus	-	-	POS	POS	POS	1.69 POS	POS	DAMA
44	BK	50	4	F	1113341	-	-	Aspergillus flavus	-	-			NEG	0.49 NEG	NEG	PATIENT DISCHARGED
45	SSB	54	5	M	1109251	-	-	Aspergillus flavus	-	PATIENT DISCHARGED	POS	POS	POS	1.03 POS	POS	PATIENT DISCHARGED
46	GK	65	6	F	1113930	-	-	Aspergillus flavus	-	-	POS	POS	NEG	0.39 NEG	NEG	PATIENT DISCHARGED
47	MM	47	4	F	1114137	-	-	Candida Tropicalis	-	-	INDETERMINATE	INDETERMINATE	NEG	0.10 NEG	NEG	PATIENT DISCHARGED
48	MP	59	5	F	1115050	-	-	Aspergillus flavus	-	-						DAMA
49	SK	86	8	F	1115483	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.40 NEG	NEG	DISCHARGE AT REQUEST
50	MP	59	5	F	1115050	-	-	Aspergillus flavus	-	DENIED						PATIENT DISCHARGED
51	SC	68	6	M	1113723	-	-	Aspergillus flavus	-	-	POS	POS	POS	2.87 POS	POS	DAMA
52	GS	52	5	M	545302	-	-	Aspergillus flavus	-	PATIENT DISCHARGED	POS	POS	NEG	0.32 NEG	NEG	PATIENT DISCHARGED
53	KC	98	9	M	295360	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.25 NEG	NEG	PATIENT DISCHARGED
54	ZS	74	7	M	319009	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
55	GS	57	5	M	1115925	-	-	Aspergillus flavus	-	DENIED	POS	POS	POS	3.19 POS	POS	PATIENT DISCHARGED
56	T	3	0	M	1115500	-	-	Candida albicans	-	FLUCONAZOLE-S,	-	-	-	-	-	PATIENT DISCHARGED
57	HS	65	6	M	1119943	-	-	Aspergillus flavus	-	-	POS	POS	POS	1.61 POS	POS	PATIENT DISCHARGED
58	RG	79	7	M	1120303	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.26 NEG	NEG	PATIENT DISCHARGED
59	IS	54	5	M	1119818	-	-	Aspergillus flavus +	-	-	POS	POS	POS	0.63 POS	POS	PATIENT DISCHARGED
60	JK	51	5	F	1121365	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
61	SS	60	5	M	27222	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.16 NEG	NEG	PATIENT DISCHARGED
62	SK	65	6	F	1122338	-	-	Aspergillus fumigatus	-	PT. DISCHARGED	POS	POS	POS	3.35 POS	POS	DISCHARGE AT REQUEST
63	VK	59	5	M	75407	-	-	Rhizopus	-	-			NEG	0.10 NEG	NEG	PATIENT DISCHARGED
64	GS	68	6	M	1124201	-	-	Candida Tropicalis	-	-	POS	POS	NEG	0.34 NEG	NEG	PATIENT DISCHARGED
65	RK	39	3	F	1244551	-	-	Aspergillus flavus	-	-	POS	POS	POS	0.61 POS	POS	DAMA
66	KK	51	5	F	1121751	-	-	Candida Tropicalis	-	-	NEG	NEG	POS	0.60 POS	POS	PATIENT DISCHARGED
67	NK	55	5	F	1123912	-	-	Mucor	-	-	INDETERMINATE	INDETERMINATE	POS	0.91 POS	POS	DAMA
68	GKS	61	6	F	1124961	-	-	C. Stellatoidea	-	-	-	-	POS	1.54 POS	POS	PATIENT DISCHARGED
69	DGS	58	5	M	142752	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.20 NEG	NEG	PATIENT DISCHARGED

Sr No.	Name	Age	age group	Sex	Mrd No.	ADMission No.	Date of ADMission	Date of DischARge	Hospital Days	Location	Provisional Diagnosis	ChiEF Complaints	VOMITING	HYPOTHYROIDISM	NAUSEA	FEVER	SOB	PAIN ABDOMEN	COUGH WITH EXPECTORATIO	COPD
70	AR	80	7	F	1132501	2021033464	07/07/2021	11/07/2021	05	Chest	CAD-RWMA-LvEF-36%, LRTI-	Loss Of Weight, Loss	N	N	N	N	N	N	N	N
71	LJ	54	5	M	94653	2021032685	07/02/2021	12/07/2021	04	MEDICINE	Type-II RF, DM-II, HTN	K/C/O Bronchial	N	N	N	N	Y	N	N	N
72	SP	70	6	M	1134568	2021034029	15/07/2021	24/07/2021	09	MEDICINE	Post Covid, HTN, CKD	-	N	N	N	N	N	N	Y	N
73	CLG	84	8	M	1135952	2021034567	12/07/2021	21/07/2021	09	CARDIO	HTN, LEFt Renal ARtery	AKI, Fungal Pneumonia	N	N	N	N	Y	N	N	N
74	RSK	66	6	M	1134066	2021033862	15/07/2021	23/07/2021	09	MEDICINE	DM-II, Pleural EFfusion,	-	N	N	N	N	Y	N	N	N
75	JK	48	4	M	1126514	2021030869	23/06/2021	18/07/2021	26	HDU	DM-II, Fungal Sepsis, LRTI,	-	N	N	N	N	Y	N	N	N
76	SK	55	5	M	1102701	2021031242	21/03/2021	27/03/2021	06	ISOLATION	DM-II, Invasive Fungal	Headache, Swelling On	N	N	N	N	N	N	N	N
77	BS	56	5	M	1134612	2021034061	07/09/2021	17/07/2021	10	MED. ICU	Post Covid, DM-II, Global	-	N	N	N	Y	Y	N	Y	N
78	KS	52	5	F	1136535	2021034792	13/07/2021	26/07/2021	14	HDU	HTN, Post Covid, Fungal	, Jaundice,	N	N	N	Y	Y	N	N	N
79	N	72	7	F	52060	2021035268	16/07/2021	23/07/2021	08	Chest	K/C/O-LBD, Old Pulm TB	-	N	N	N	Y	Y	N	Y	N
80	PT	35	3	M	1138757	2021035598	17/07/2021	05/08/2021	20	MEDICINE	CLD C DM-II, Hepato Pulm	-	N	N	N	Y	Y	N	Y	N
81	MS	59	5	M	206509	2021035982	19/07/2021	23/07/2021	05	GASTRO	DM-II, P/E Fungal Sepsis,	Presented C Altered	N	N	N	N	Y	N	N	N
82	AR	39	3	M	1139590	2021035957	19/07/2021	27/07/2021	09	MEDICINE	Covid AB+VE, Prediabetic	Headache, , Upper Chest	N	N	N	Y	N	N	Y	N
83	AK	42	4	F	804	2021036706	23/07/2021	24/07/2021	02	Chest	Lower RTI	ADMitted For DiAGnostic	N	N	N	N	N	N	N	N
84	HS	76	7	M	1141876	2021036896	26/07/2021	30/07/2021	05	EMG.	DM-II, HTN, Fungal Sepsis	-	N	N	N	Y	Y	N	N	N
85	JS	48	4	M	1153420	2021041384	13/08/2021	27/08/2021	15	MEDICINE	Post Covid, H1N1	-	N	N	N	Y	Y	N	Y	N
86	BS	56	5	M	1154922	2021041751	15/08/2021	16/09/2021	02	Chest	HTN, SEPSIS	RESTLESSNESS	N	N	N	N	Y	N	Y	N
87	KJ	77	7	F	499096	2021041826	14/08/2021	20/08/2021	07	CARDIO	DM-II, HTN, CAD, Severe Lv		Y	N	Y	N	Y	N	N	N
88	RK	61	6	F	914654	2021042773	11/08/2021	25/08/2021	14	EMG.	DM-II, Old.Pulm	Generalised Body	N	N	N	Y	Y	N	N	N
89	PS	87	8	M	480985	2021041806	14/08/2021	25/08/2021	12	HDU	sepsis with LRTI	-	N	N	N	N	N	N	N	N
90	SS	57	5	M	1160357	2021043997	24/08/2021	05/09/2021	13	EMG. ICU	DM-II, AKI, Fungal Sepsis,	, Neck Swelling,	N	N	N	Y	Y	N	N	N
91	KS	72	7	F	1127593	2021043223	21/08/2021	31/08/2021	11	CARDIO	DM-II, HTN, Ba, Ra Anemia,	-	N	N	N	N	Y	N	N	N
92	NS	60	5	F	1161090	2021044293	25/08/2021	16/09/2021	23	PCCU	DM-II, HTN, Multiple B/L	-	N	N	N	Y	Y	N	Y	N
93	PKJ	82	8	M	1160403	2021044011	24/08/2021	29/08/2021	06	EMG. ICU	HTN, Cigratte Smoker, CAD C	-	N	N	N	N	Y	N	Y	N
94	MC	66	6	M	1161831	2021044557	26/08/2021	05/09/2021	11	HDU	Steroid induced	Chest pain	N	N	N	N	Y	N	Y	N
95	RG	51	5	M	1158629	2021045610	31/08/2021	31/08/2021	01	EYE	Patient come for left eye	H/O-left open globe injury.	N	N	N	N	N	N	N	N
96	SK	55	5	F	1163590	2021045214	30/08/2021	01/09/2021	03	PCCU	CAD C RWMA, EF-25%, AKI,	C/O-, Loose Stools	N	N	N	Y	N	N	N	N
97	NS	66	6	M	1164104	2021045385	30/08/2021	07/09/2021	09	MEDICINE	DM-II, Community	-	N	N	N	Y	N	N	Y	N
98	S	45	4	F	1165335	2021046897	06/09/2021	09/09/2021	04	ENT	FUNGAL SEPSIS	C/O- NASAL DISCHARGE	N	N	N	Y	Y	N	N	N
99	KK	52	5	F	1163382	2021045083	28/08/2021	30/09/2021	03	MED. ICU	DM-II, HTN, LEFT LEG DVT	ALTERED SENSORIUM,	N	N	N	Y	N	N	N	N
100	KK	52	5	F	1163382	2021045083	28/08/2021	30/09/2021	03	MED. ICU	DM-II, HTN, LEFT LEG DVT	ALTERED SENSORIUM,	N	N	N	Y	N	N	N	N
101	SS	74	7	M	1169184	2021047266	07/09/2021	30/09/2021	24	STROKE-ICU	DM-II, HTN, HYPOTHYROID	ALTERED SENSORIUM,	N	Y	N	Y	N	N	N	N
102	SJ	69	6	F	213297	2021046749	05/09/2021	04/10/2021	30	CARDIO	HTN, BA, POST BMV, MILD TO	CHEST CONGESTION	N	N	N	Y	N	N	Y	N
103	SD	60	5	F	542200	2021047007	06/09/2021	14/09/2021	09	GASTRO	DM-II, HTN, MILD TR, MILD	-	N	N	N	N	Y	Y	N	N
104	UB	65	6	M	1169281	2021047322	08/09/2021	13/09/2021	06	MEDICINE	HTN, REFORMED	SUDDEN ONSET	N	N	N	N	N	N	N	N

Sr No.	Name	Age	age group	Sex	Mrd No.	CKD	HTN	DIABETES	OTHER	FLU	VORI	AMPHO	CASPO	MICA	FLUCY	ITRA	Drug History	UrinARy Catheterizatio	Central Line Insertion	Respiratory Ventilation
70	AR	80	7	F	1132501	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
71	LJ	54	5	M	94653	N	Y	Y	N	-	-	-	-	-	-	-	Tab Derivy 10Mg, Drotin	N	N	N
72	SP	70	6	M	1134568	Y	Y	N	N	-	-	-	-	-	-	-	KNCNONHTN, Tab. Amalong	Y	N	Y
73	CLG	84	8	M	1135952	N	Y	Y	N	-	-	-	-	-	-	-	Tab. Ramipril, Tab.	Y	Y	Y
74	RSK	66	6	M	1134066	N	N	Y	N	-	-	-	-	-	-	-	Tab. Glycomet 1 Od	Y	N	Y
75	JK	48	4	M	1126514	N	N	Y	N	S	S	S	S	S	-	-	Inj.P. Insulin, Inj. Nph.	Y	N	Y
76	SK	55	5	M	1102701	N	N	Y	N	-	-	-	-	-	-	-	Ecosprin, Cap Urimax 0.4Mg	Y	Y	Y
77	BS	56	5	M	1134612	N	N	Y	N	-	-	-	-	-	-	-	TypeNIINDM, Eptoin	Y	N	Y
78	KS	52	5	F	1136535	N	Y	N	N	-	-	-	-	-	-	-	Post Covid Ds, KNCNONHTN	Y	N	Y
79	N	72	7	F	52060	N	N	N	N	-	-	-	-	-	-	-	Pulm. TB, KNCNONIbd	Y	N	Y
80	PT	35	3	M	1138757	N	N	Y	N	-	-	-	-	-	-	-	KNCNONCLD, KNCNONDMNI	Y	N	Y
81	MS	59	5	M	206509	N	N	Y	N	-	-	-	-	-	-	-	N	Y	N	Y
82	AR	39	3	M	1139590	N	N	N	N	-	-	-	-	-	-	-	Tab. RNCivex 600N300 Mg	N	N	N
83	AK	42	4	F	804	N	N	N	N	-	-	-	-	-	-	-	N	N	N	N
84	HS	76	7	M	1141876	N	Y	Y	N	-	-	-	-	-	-	-	N	Y	N	Y
85	JS	48	4	M	1153420	N	Y	N	N	-	-	-	-	-	-	-	N	Y	N	Y
86	BS	56	5	M	1154922	N	Y	N	N	-	-	-	-	-	-	-	ON ANTI HYPERTENSIVE	Y	Y	N
87	KJ	77	7	F	499096	N	Y	Y	N	-	-	-	-	-	-	-	Tab. Attrovastin	Y	N	Y
88	RK	61	6	F	914654	N	N	Y	N	-	-	-	-	-	-	-	Tab. Thyroxine 100 Mg Od	N	N	N
89	PS	87	8	M	480985	N	N	N	N	-	-	-	-	-	-	-	N	N	N	N
90	SS	57	5	M	1160357	N	N	Y	N	-	-	-	-	-	-	-	Insulin Infusion 40N40 At, Tab	Y	N	Y
91	KS	72	7	F	1127593	N	Y	Y	N	-	-	-	-	-	-	-	Cap. Ecosprin Av, Tab.	Y	N	Y
92	NS	60	5	F	1161090	N	Y	Y	N	-	S	S	S	-	-	S	Tab Amalong 5Mg Od, Tab.	Y	N	Y
93	PKJ	82	8	M	1160403	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
94	MC	66	6	M	1161831	N	N	Y	N	-	-	-	-	-	-	-	Tab. Metformin	Y	N	Y
95	RG	51	5	M	1158629	N	N	N	N	-	-	-	-	-	-	-	N	N	N	N
96	SK	55	5	F	1163590	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
97	NS	66	6	M	1164104	N	N	Y	N	-	-	-	-	-	-	-	Tab. Glycomet Sr 1000 Mg Od	Y	N	Y
98	S	45	4	F	1165335	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
99	KK	52	5	F	1163382	N	Y	Y	N	S	S	S	S	S	-	-	INJ. PALM INSULIN	Y	N	Y
100	KK	52	5	F	1163382	N	N	N	N	-	-	-	-	-	-	-	INJ. PALM INSULIN	Y	N	Y
101	SS	74	7	M	1169184	N	Y	Y	N	S	S	S	S	S	-	-	INJ. PALM INSULIN	Y	N	Y
102	SJ	69	6	F	213297	N	Y	N	N	-	S	R	S	-	-	S	TAB. ECOSPRIN 75MG OD,	Y	Y	Y
103	SD	60	5	F	542200	N	Y	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET,	Y	Y	Y
104	UB	65	6	M	1169281	N	Y	N	N	-	-	-	-	-	-	-	TAB. ECOSPRIN GOLD 20MG	Y	N	Y

Sr No.	Name	Age	age group	Sex	Mrd No.	Corticosteroid Use	Total Parental Nutrition	Peritoneal Dialysis	Underlying Co-Morbid	Diabetes Mellitus	Malignancy	HIV/AIDS	Others	No Antifungals Given	YES/NO ANTIFUNGALS	Specimen	Date	Lab id No	Radiological Findings	Direct Microscopy
70	AR	80	7	F	1132501	N	N	N	CAD	N	N	N	N	No Antifungals Given	N	SPUTUM	7N7N2021	418	AS PER NORMAL	NFES
71	LJ	54	5	M	94653	Y	N	N	N	N	N	N	N	N	N	SPUTUM	7N8N2021	424	COAD AND BNL	NFES
72	SP	70	6	M	1134568	N	N	N	HTN, POST COVID	N	N	N	N	INTRACONAZOLE	YES	SPUTUM	7N13N2021	439	CXRN HOMOGENOU	BYLC WITH PH
73	CLG	84	8	M	1135952	N	N	N	HTN, DMNII, CAD, AKI	Y	N	N	N	VORICONAZOLE	YES	SPUTUM	7N14N2021	446	N	BYLC WITH PH
74	RSK	66	6	M	1134066	Y	N	N	N	Y	N	N	N	INJ. AMPHONBN25	YES	SPUTUM	7N16N2021	449	N	BYLC WITH PH
75	JK	48	4	M	1126514	N	N	N	HIV+VE	Y	N	Y	N	COSPOFUNGIN	YES	BAL	7N15N2021	451	POST COVID PNEUMONIA	NFES
76	SK	55	5	M	1102701	N	N	Y	CKD	Y	N	N	N	ISAVVACONAZOLE	YES	SPUTUM	7N15N2021	452	HRCT CHESTN MILD BNL	BYLC WITH PH
77	BS	56	5	M	1134612	Y	N	N	COVID+VE	Y	N	N	N	N	N	SPUTUM	7N16N2021	454	HRCT CHESTN CT SCORE	HYALINE ASEPTATT
78	KS	52	5	F	1136535	Y	N	N	HTN	Y	N	N	N	VORICONAZOLE	YES	SPUTUM	7N16N2021	457	N	NFES
79	N	72	7	F	52060	Y	N	N	OLD PULMNTB	N	N	N	N	No Antifungals Given	N	SPUTUM	7N18N2021	461	N	BYLC WITH PH
80	PT	35	3	M	1138757	Y	N	N	CLD	Y	N	N	N	TAB. VORICONAZOL	YES	ET	7N18N2021	462	BULKY ABDOMINAL	HYALINE ASEPTATT
81	MS	59	5	M	206509	N	N	N	POST COVID, MILD MR, PAH	Y	N	N	N	VORICONAZOLE	YES	SPUTUM	7N21N2021	470	HRCT CHESTN EXTENSIVE	BYLC WITH PH
82	AR	39	3	M	1139590	N	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	7N21N2021	471	N	NFES
83	AK	42	4	F	804	N	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	7N23N2021	477	HRCT CHESTN SUBNPLEURAL	BYLC WITH PH
84	HS	76	7	M	1141876	Y	N	N	HTN	Y	N	N	N	FLUCONAZOLE	YES	SPUTUM	7N27N2021	486	HRCT CHESTN MODERATE	BYLC WITH PH
85	JS	48	4	M	1153420	N	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	8N15N2021	526	PERIBRONCOVASCULAR	BYLC WITH PH
86	BS	56	5	M	1154922	Y	N	N	HTN	N	N	N	N	FLUCONAZOLE	YES	SPUTUM	8N17N2021	531	N	BYLC WITH PH
87	KJ	77	7	F	499096	Y	N	N	HTN, CAD	Y	N	N	N	N	N	SPUTUM	8N19N2021	543	XRAY CHESTN AS PER	HYALINE SEPTATE
88	RK	61	6	F	914654	N	N	N	N	N	N	N	N	INJ. CASPOFUNGIN	YES	ET	8N20N2021	544	N	HYALINE SEPTATE
89	PS	87	8	M	480985	N	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	8N20N2021	546	N	BYLC WITH PH
90	SS	57	5	M	1160357	Y	N	N	HTN	Y	N	N	N	ANIDULAFUNGIN	YES	ET	8N26N2021	566	USG CHESTN MILD PLEURAL	BYLC WITH PH
91	KS	72	7	F	1127593	Y	N	N	BA, RA	Y	N	N	N	No Antifungals Given	N	SPUTUM	8N25N2021	567	HRCT CHESTN AS PER	BYLC WITH PH
92	NS	60	5	F	1161090	N	N	N	CKD, UTI, HTN	Y	N	N	N	TAB. VORICONAZOL	YES	SPUTUM	8N26N2021	568	HRCT CHESTN MULTIPLE BNL	BYLC WITH PH
93	PKJ	82	8	M	1160403	N	N	N	HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	8N26N2021	569	N	BYLC WITH PH
94	MC	66	6	M	1161831	Y	N	N	DMNII, BA	Y	N	N	N	INTRACONAZOLE	YES	SPUTUM	8N31N2021	579	N	BYLC WITH PH
95	RG	51	5	M	1158629	N	N	N	N	Y	N	N	N	N	N	Vitrous Aspiration	8N31N2021	584	N	HYALINE ASEPTATT
96	SK	55	5	F	1163590	Y	N	N	CAD, AKI, EFN25%	N	N	N	N	TAB. ISAVUCONAZO	YES	ET	9N1N2021	585	N	HYALINE SEPTATE
97	NS	66	6	M	1164104	N	N	N	N	Y	Y	Y	N	VORICONAZOLE	YES	SPUTUM	9N1N2021	587	N	BYLC
98	S	45	4	F	1165335	N	N	N	N	N	N	N	N	TAB. VORICONAZOL	YES	DEBRIS FROM MAXILLARY	9N7N2021	605	MRI PNS WITH CONTRASTN	HYALINE ASEPTATT
99	KK	52	5	F	1163382	Y	N	N	HYPOTHYROID	Y	N	N	N	N	N	PCD	9N8N2021	607	NCCT KUB	NFES
100	KK	52	5	F	1163382	Y	N	N	HYPOTHYROID	Y	N	N	N	N	N	PCD	9N8N2021	608	N	NFES
101	SS	74	7	M	1169184	Y	N	Y	HYPOTHYROID	Y	N	N	N	N	N	PCD	9N8N2021	609	N	NFES
102	SJ	69	6	F	213297	N	N	HTN, BA	N	N	N	N	N	TAB. VORICONAZOL	YES	SPUTUM	9N10N2021	610	USG CHESTNSNO	NFES
103	SD	60	5	F	542200	N	N	N	HTN, CLD	Y	N	N	N	No Antifungals Given	N	SPUTUM	9N10N2021	614	N	BYLC
104	UB	65	6	M	1169281	N	Y	Y	HTN, LVF	N	N	N	N	No Antifungals Given	N	SPUTUM	9N11N2021	621	HRCT CHESTNBNL	NFES

Sr No.	Name	Age	age group	Sex	Mrd No.	India Ink PrepARation	Latex AGglUTInation	Culture	POSA	Antifungal Susceptibility	1-3-beta-Glucan-Essay	FUNGITELL	GALACTOMANNAN		Galacto Mannan	Outcome
70	AR	80	7	F	1132501	-	-	C. Stellatoidea	-	-	-	-	-	-	-	DISCHARGE AT REQUEST
71	LJ	54	5	M	94653	-	-	Aspergillus flavus	-	-						PATIENT DISCHARGED
72	SP	70	6	M	1134568	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
73	CLG	84	8	M	1135952	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
74	RSK	66	6	M	1134066	-	-	Aspergillus flavus +	-	-						PATIENT DISCHARGED
75	JK	48	4	M	1126514	-	-	Candida Gullermondi	-	FLU-S, VORI-S, AMPHO-S,	POS	POS	POS	0.91 POS	POS	DAMA
76	SK	55	5	M	1102701	-	-	Candida Tropicalis	-	-	-	-	NEG	0.24 NEG	NEG	DISCHARGE AT REQUEST
77	BS	56	5	M	1134612	-	-	Aspergillus fumigatus	-	-			POS	1.09 POS	POS	PATIENT DISCHARGED
78	KS	52	5	F	1136535	-	-	Candida Tropicalis	-	-	NEG	NEG	POS	0.57 POS	POS	PATIENT DISCHARGED
79	N	72	7	F	52060	-	-	C. Stellatoidea	-	-	-	-	NEG	0.29 NEG	NEG	PATIENT DISCHARGED
80	PT	35	3	M	1138757	-	-	Aspergillus flavus	-	PATIENT WAS STARTED ON						DAMA
81	MS	59	5	M	206509	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.26 NEG	NEG	DAMA
82	AR	39	3	M	1139590	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
83	AK	42	4	F	804	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.26 NEG	NEG	PATIENT DISCHARGED
84	HS	76	7	M	1141876	-	-	Candida Tropicalis	-	-	POS	POS	NEG	0.38 NEG	NEG	PATIENT DISCHARGED
85	JS	48	4	M	1153420	-	-	C. Stellatoidea	-	-	NEG	NEG	NEG	0.20 NEG	NEG	PATIENT DISCHARGED
86	BS	56	5	M	1154922	-	-	Candida Tropicalis	-	-	-	-	-	-	-	DAMA
87	KJ	77	7	F	499096	-	-	Aspergillus flavus	-	PATIENT DISCHARGED						PATIENT DISCHARGED
88	RK	61	6	F	914654	-	-	Aspergillus flavus	-	-			POS	0.57 POS	POS	DAMA
89	PS	87	8	M	480985	-	-	C. Stellatoidea	-	-	-	-	NEG	0.06 NEG	NEG	PATIENT DISCHARGED
90	SS	57	5	M	1160357	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.48 NEG	NEG	PATIENT DISCHARGED
91	KS	72	7	F	1127593	-	-	C. Stellatoidea	-	-	-	-	POS	0.79 POS	POS	PATIENT DISCHARGED
92	NS	60	5	F	1161090	-	-	Aspergillus fumigatus	S	VORICONAZOLE-S,	POS	POS	POS	1.83 POS	POS	PATIENT DISCHARGED
93	PKJ	82	8	M	1160403	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
94	MC	66	6	M	1161831	-	-	Candida albicans	-	-	-	-	NEG	0.27 NEG	NEG	DISCHARGE AT REQUEST
95	RG	51	5	M	1158629	-	-	Aspergillus flavus	-	Patiend was admitted and						PATIENT DISCHARGED
96	SK	55	5	F	1163590	-	-	Aspergillus flavus	-	-						DAMA
97	NS	66	6	M	1164104	-	-	Candida Tropicalis	-	-	NEG	NEG	NEG	0.25 NEG	NEG	PATIENT DISCHARGED
98	S	45	4	F	1165335	-	-	Aspergillus flavus	-	PATIENT DISCHARGED						PATIENT DISCHARGED
99	KK	52	5	F	1163382	-	-	Candida Tropicalis	-	FLU-S, VORI-S, AMPHO-S,						DAMA
100	KK	52	5	F	1163382	NEGATIVE	NEGATIVE	Candida Tropicalis	-	-						DAMA
101	SS	74	7	M	1169184	-	-	Candida Tropicalis	-	FLU-S, VORI-S, AMPHO-S,						DAMA
102	SJ	69	6	F	213297	-	-	Aspergillus flavus	-	VORICONAZOLE-S(0.12),						PATIENT DISCHARGED
103	SD	60	5	F	542200	-	-	Candida Tropicalis	-	-	-	-	-	-	-	DAMA
104	UB	65	6	M	1169281	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED

Sr No.	Name	Age	age group	Sex	Mrd No.	ADMission No.	Date of ADMission	Date of DischARge	Hospital Days	Location	Provisional Diagnosis	ChiEF Complaints	VOMITING	HYPOTHYROIDISM	NAUSEA	FEVER	SOB	PAIN ABDOMEN	COUGH WITH EXPECTORATIO	COPD
105	RSL	79	7	M	224764	2021046471	04/09/2021	16/09/2021	13	CARDIO	CAD, AKI, PANCYTOPENI	-	N	N	N	N	Y	N	N	N
106	JS	45	4	M	1170740	2021048037	10/09/2021	17/09/2021	08	GASTRO	ACUTE PANCREATITIS	BODY WEAKNESS,	N	N	N	N	N	N	N	N
107	HK	67	6	F	1170000	2021047635	09/09/2021	18/09/2021	10	GASTRO	HTN, POST COVID BA AND	-	N	N	N	Y	Y	N	Y	N
108	SA	70	6	M	870760	2021047698	09/09/2021	15/09/2021	06	Chest	LRTI, SEPSIS	GHABRAHAT	N	N	N	N	N	N	N	N
109	PDS	80	7	M	1173354	202104789	22/09/2021	28/09/2021	07	HDU	DM-II, HTN, CAD, POST	-	N	N	N	Y	Y	N	Y	N
110	NS	70	6	M	1171914	2021048356	12/09/2021	27/09/2021	16	CARDIO	HTN, CAD, AF WITH FEVER	CHEST HEAVINESS	N	N	N	Y	N	N	N	N
111	BS	55	5	M	1175951	2021049913	18/09/2021	24/09/2021	07	PCCU	toxic leukoencephal	LOSS OF CONSCIOUSNE	N	N	N	Y	Y	N	N	N
112	VR	45	4	F	1153963	2021041520	13/08/2021	01/10/2021	19	PL-SUR	FATTY LIVER, RSA CHRONIC	PRESENTED WITH A/H/O-	N	N	N	N	N	N	N	N
113	PN	80	7	F	1176040	2021049946	19/09/2021	01/10/2021	13	MEDICINE	DM-II, ACUTE EXACERBATIO	-	N	N	N	N	Y	N	N	N
114	PS	70	6	M	1164386	2021050230	20/09/2021	21/09/2021	02	Chest	HTN, LUNG ABSCESS WITH	-	N	N	N	Y	N	N	Y	N
115	S	69	6	F	1176203	2021050054	19/09/2021	02/10/2021	14	STROKE-ICU	LVH, HTN, SCLEROTIC	-	N	N	N	N	Y	N	N	N
116	DSJ	71	7	M	1177765	2021050613	22/09/2021	28/09/2021	07	ISOLATION	DM-II, ILD, LEFT MIDDLE	-	N	N	N	Y	N	N	N	N
117	DS	60	5	M	1172257	2021478936	10/09/2021	04/10/2021	25	GEN. SUR	MILD TR, HTN, MILD	HERNIA REPAIR	N	N	N	N	N	N	N	N
118	JD	79	7	F	47619	2021050623	22/09/2021	28/09/2021	07	HDU	BA, RF-II, HF, UTI	CHEST PAIN	N	N	N	N	Y	N	Y	N
119	KN	62	6	M	1178878	2021051051	23/09/2021	13/10/2021	21	NEPHRO	DM-II, HTN, FUNGAL		Y	N	N	Y	Y	Y	N	N
120	PK	55	5	M	1178793	2021051261	24/09/2021	11/10/2021	18	CARDIO	CAD, AF WITH CVR, COPD	CHEST CONGESTION	N	N	N	Y	N	N	N	N
121	PK	55	5	M	1178793	2021051261	24/09/2021	11/10/2021	18	CARDIO	CAD, AF WITH CVR, COPD,	DYSPNOEA, CHEST	N	N	N	Y	N	N	N	Y
122	RG	43	4	M	1179507	2022013066	27/09/2021	10/10/2021	14	MEDICINE	DM-II, HTN, DEPRESSIVE	A/H/O-OPC POISONING, ,	N	N	N	Y	N	N	N	N
123	GD	80	7	F	657605	2021050867	23/09/2021	02/10/2021	10	CARDIO	BA, CAD	CHEST PAIN, DYSPNEA	N	N	N	Y	N	N	N	N
124	RS	49	4	M	1176033	2021049943	18/09/2021	04/10/2021	17	MEDICINE	CKD, DM-II, MILD CVH,	-	N	N	N	N	Y	Y	N	N
125	R	19	1	F	1182427	2021052445	29/09/2021	06/10/2021	08	EMG. ICU	DENGUE, TROPICAL	FALL IN URINE OUTPUT	N	N	N	Y	N	Y	N	N
126	KK	80	7	F	1112689	2021049586	17/09/2021	07/10/2021	21	CARDIO	CA OVARY, INTESTINAL	OVARIAN CANCER,	N	N	N	N	N	Y	N	N
127	JS	39	3	M	1086517	2021045153	29/08/2021	08/10/2021	10	STROKE-ICU	LGBS, SEPTIC SHOCK,	SWELLING OF UPPER LIMB,	N	N	N	N	N	N	N	N
128	PS	29	2	M	1181402	2021053441	04/10/2021	08/10/2021	05	ENT	FUNGAL SEPSIS,	RIGHT ENDOSCOPIC	N	N	N	N	N	N	N	N
129	RP	58	5	M	1187162	2021054403	07/10/2021	10/10/2021	04	GEN. SUR	COPD, RIGHT PNEUMOTHOR	-	N	N	N	Y	Y	N	N	Y
130	AJ	60	5	M	1184653	2021053382	04/10/2021	12/10/2021	09	GASTRO	CLD WITH PORTAL	-	N	N	N	N	Y	Y	N	N
131	SK	56	5	M	1183943	2021054792	08/10/2021	11/10/2021	04	PCCU	HTN, PULMONARY	-	N	N	N	N	Y	N	Y	Y
132	JS	71	7	M	968629	2021052980	01/10/2021	14/10/2021	14	NEURO	CAD, ACUTE IWMI,	DIFFICULTY IN GETTING UP	N	N	N	N	N	N	N	N
133	KG	42	4	M	1186801	2021054274	07/10/2021	19/10/2021	13	Chest	BA, LRTI, ABPA	BLOOD IN SPUTUM,	N	N	N	Y	Y	N	Y	N
134	KS	34	3	M	1187997	2021054747	08/10/2021	13/10/2021	06	MED. ICU	PL HIV, PANCYTOPENI	ALTERED SENSORIUM	N	N	N	Y	N	N	N	N
135	SS	88	8	M	1188730	2021055046	09/10/2021	21/10/2021	13	PCCU	HCV REACTIVE, LEFT UPPER	GENERAlized Weakness,	N	N	N	Y	N	N	N	N
136	JS	30	2	M	1188010	2021054767	08/10/2021	16/10/2021	09	GAS-ICU	FATTY LIVER GRADE-I,	-	N	N	N	N	N	Y	N	N
137	SS	64	6	M	1189123	2021055327	11/10/2021	22/10/2021	12	NEURO	COCULATED LEFT SIDED	-	N	N	N	Y	Y	N	N	N
138	KC	71	7	M	455304	2021055719	12/10/2021	23/10/2021	12	GEN. SUR	MILD PANCARDIAL	-	N	N	N	N	Y	N	N	N
139	NS	40	3	F	1189585	2021055425	11/10/2021	30/10/2021	20	MED. ICU	RIGHT SIDED HYDROPNEUM	PULM. KOCHS, ,	N	N	N	Y	Y	N	N	N

Sr No.	Name	Age	age group	Sex	Mrd No.	CKD	HTN	DIABETES	OTHER	FLU	VORI	AMPHO	CASPO	MICA	FLUCY	ITRA	Drug History	UrinARy Catheterizatio	Central Line Insertion	Respiratory Ventilation
105	RSL	79	7	M	224764	N	Y	Y	N	-	-	-	-	-	-	-	CAP. TAMSULOSIN	Y	N	Y
106	JS	45	4	M	1170740	N	N	N	N	-	-	-	-	-	-	-	OPIOID ADDICT	Y	N	Y
107	HK	67	6	F	1170000	N	Y	N	N	-	-	-	-	-	-	-	TAB. ECOSPRINNAV	Y	N	Y
108	SA	70	6	M	870760	N	N	N	N	-	-	-	-	-	-	-	N	N	N	N
109	PDS	80	7	M	1173354	N	Y	Y	N	-	-	-	-	-	-	-	TAB. ECOSPRINNAV	Y	N	N
110	NS	70	6	M	1171914	N	Y	N	N	-	-	-	-	-	-	-	TAB. TANSULOSIN	Y	N	Y
111	BS	55	5	M	1175951	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	Y
112	VR	45	4	F	1153963	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
113	PN	80	7	F	1176040	N	N	Y	N	-	-	-	-	-	-	-	TAB. GLMIPRIDENM	Y	Y	Y
114	PS	70	6	M	1164386	N	Y	N	N	-	S	S	-	-	-	-	TAB AMALONGNA	N	N	N
115	S	69	6	F	1176203	N	Y	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	Y	Y
116	DSJ	71	7	M	1177765	N	N	Y	N	-	-	-	-	-	-	-	TAB DYNAGLIPTIN	N	N	N
117	DS	60	5	M	1172257	N	Y	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	N	Y
118	JD	79	7	F	47619	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
119	KN	62	6	M	1178878	N	Y	Y	N	-	-	-	-	-	-	-	TEGRITAL 200MG OD	Y	Y	Y
120	PK	55	5	M	1178793	N	N	N	N	-	-	-	-	-	-	-	CAP. ECOSPRINNAV	Y	N	Y
121	PK	55	5	M	1178793	N	N	N	N	-	-	-	-	-	-	-	TAB. ATORVASTATI	Y	Y	Y
122	RG	43	4	M	1179507	N	Y	Y	N	-	-	-	-	-	-	-	TAB. METFORMIN	Y	Y	Y
123	GD	80	7	F	657605	N	N	N	N	-	-	-	-	-	-	-	TAB. ATROVASTIN	Y	N	Y
124	RS	49	4	M	1176033	Y	N	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET	Y	N	Y
125	R	19	1	F	1182427	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	Y
126	KK	80	7	F	1112689	N	Y	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET	Y	Y	Y
127	JS	39	3	M	1086517	N	N	N	N	-	-	-	-	-	-	-	TEB NEXITO 5MG	Y	Y	Y
128	PS	29	2	M	1181402	N	N	N	N	-	-	-	-	-	-	-	N	N	N	N
129	RP	58	5	M	1187162	N	Y	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	N	Y
130	AJ	60	5	M	1184653	N	Y	N	N	-	-	-	-	-	-	-	N	Y	N	Y
131	SK	56	5	M	1183943	N	Y	N	N	-	-	-	-	-	-	-	TAB. TELMA 40MG	Y	N	Y
132	JS	71	7	M	968629	N	N	N	N	-	-	-	-	-	-	-	TAB. ECOSPRIN 150MG, TAB.	Y	N	N
133	KG	42	4	M	1186801	N	N	N	N	-	-	-	-	-	-	-	TAB. MONTAIR 10MG	Y	N	Y
134	KS	34	3	M	1187997	N	N	N	N	-	-	-	-	-	-	-	ON ATT, INJ DEXONA	Y	Y	Y
135	SS	88	8	M	1188730	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
136	JS	30	2	M	1188010	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
137	SS	64	6	M	1189123	N	N	N	N	-	-	-	-	-	-	-	CAP. ECOSPRIN 75MG	Y	N	Y
138	KC	71	7	M	455304	N	Y	N	N	-	-	-	-	-	-	-	N	Y	N	Y
139	NS	40	3	F	1189585	N	N	N	N	-	-	-	-	-	-	-	ON ATT	Y	Y	Y

Sr No.	Name	Age	age group	Sex	Mrd No.	Corticosteroid Use	Total Parental Nutrition	Peritoneal Dialysis	Underlying Co-Morbid	Diabetes Mellitus	Malignancy	HIV/AIDS	Others	No Antifungals Given	YES/NO ANTIFUNGALS	Specimen	Date	Lab id No	Radiological Findings	Direct Microscopy
105	RSL	79	7	M	224764	Y	N	N	HTN, CAD	Y	N	N	N	No Antifungals Given	N	SPUTUM	9N14N2021	626	N	NFES
106	JS	45	4	M	1170740	N	N	N	N	N	N	N	N	TAB. VORICONAZOL	YES	NASAL MUCOCA	9N14N2021	627	ET PNSNSOFT TISSUE	HYALINE ASEPTATT
107	HK	67	6	F	1170000	Y	N	N	HTN, BA, RFNII	N	N	N	N	CANDID MOUTH PAINT	YES	SPUTUM	9N14N2021	628	HRCT CHESTNSNON	NFES
108	SA	70	6	M	870760	N	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	9N14N2021	629	N	NFES
109	PDS	80	7	M	1173354	N	N	N	PULM. TB (ATT SINCE ON	Y	N	N	N	No Antifungals Given	N	SPUTUM	9N14N2021	631	HRCT CHESTNFBROSI	BYLC
110	NS	70	6	M	1171914	Y	N	N	CAD, HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	9N16N2021	637	N	BYLC
111	BS	55	5	M	1175951	N	N	N	HTN	N	N	N	N	N	N	ET	9N19N2021	646	N	BYLC
112	VR	45	4	F	1153963	N	N	N	N	N	N	N	N	N	N	TISSUE	9N20N2021	648	USG ABDOMENNFA	BYLC WITH PH+ HYALINE
113	PN	80	7	F	1176040	Y	N	N	N	N	N	N	N	No Antifungals Given	N	ET	9N21N2021	649	N	NFES
114	PS	70	6	M	1164386	N	N	N	HTN	N	N	N	N	No Antifungals Given	N	BAL	9N21N2021	651	N	NFES
115	S	69	6	F	1176203	N	N	N	HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	9N23N2021	654	N	BYLC
116	DSJ	71	7	M	1177765	N	N	N	CBNAAT +VE, ATT	Y	N	N	N	INTRACONAZOLE	YES	SPUTUM	9N24N2021	657	HRCT CHESTNSNO	BYLC
117	DS	60	5	M	1172257	N	N	N	HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	9N25N2021	659	N	BYLC
118	JD	79	7	F	47619	Y	N	N	BA, HF	N	N	N	N	No Antifungals Given	N	SPUTUM	9N25N2021	660	N	BYLC
119	KN	62	6	M	1178878	N	Y	N	CHRONIC SMOKER	Y	N	N	N	TAB. VORICONAZOL	YES	ET	9N20N2021	663	HRCT CHESTNMULTI	HYALINE ASEPTATT
120	PK	55	5	M	1178793	N	N	N	CAD, COPD	N	N	N	N	No Antifungals Given	N	SPUTUM	9N26N2021	664	HRCT CHESTNSNO	NFES
121	PK	55	5	M	1178793	N	Y	N	CAD, COPD	N	N	N	N	No Antifungals Given	N	Sputum	9N28N2021	670	SPIRAL CT CHESTNSNON	NFES
122	RG	43	4	M	1179507	N	Y	N	HTN, SEPSIS, AKI	Y	N	N	N	No Antifungals Given	N	ET	9N28N2021	674	N	BYLC
123	GD	80	7	F	657605	Y	N	N	BA, CAD	N	N	N	N	No Antifungals Given	N	SPUTUM	9N28N2021	675	N	NFES
124	RS	49	4	M	1176033	Y	Y	N	CAD	Y	N	N	N	No Antifungals Given	N	ET	10N4N2021	687	N	NFES
125	R	19	1	F	1182427	N	Y	N	LRTI	N	N	N	N	No Antifungals Given	N	SPUTUM	10N4N2021	688	USG ABDOMENN	BYLC
126	KK	80	7	F	1112689	Y	Y	N	CA OVARY, HTN. BA	Y	N	N	N	FLUCONAZOLE	YES	SUCTION TIP	10N5N2021	695	HRCT CHESTN RIGHT	BYLC
127	JS	39	3	M	1086517	N	N	N	SEPSIS	N	N	N	N	No Antifungals Given	N	SPUTUM	10N5N2021	697	N	BYLC
128	PS	29	2	M	1181402	N	N	N	N	N	N	N	N	TAB. ANTIDULAFUN	YES	SINO NASAL MUCOSA	10N5N2021	698	MRI FACE WITH	HYALINE SEPTATE
129	RP	58	5	M	1187162	N	N	N	HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	10N9N2021	705	HRCT CHESTN COPD,	BYLC
130	AJ	60	5	M	1184653	N	N	N	CLD, HTN	N	N	N	N	INJ. VORICONAZOL	YES	NAIL	10N9N2021	707	N	HYALINE SEPTATE
131	SK	56	5	M	1183943	Y	N	N	HTN, OLD PULMONARY	N	N	N	N	No Antifungals Given	N	SPUTUM	10N10N2021	710	N	BYLC
132	JS	71	7	M	968629	N	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	10N10N2021	711	N	BYLC
133	KG	42	4	M	1186801	Y	N	N	BA	N	N	N	N	TAB. INTRACONAZO	YES	SPUTUM	10N11N2021	713	OXRN RIGHT LOWER ZONE	HYALINE SEPTATE
134	KS	34	3	M	1187997	Y	N	N	ON ATT	N	N	INJ. ACYCLOVIR	N	INJ. CASPOFUNGIN	YES	CSF	10N11N2021	716	NCCT HEADN NORMAL	BYLC
135	SS	88	8	M	1188730	N	N	N	HCV REACTIVE	N	N	N	N	No Antifungals Given	N	SPUTUM	10N12N2021	720	N	BYLC
136	JS	30	2	M	1188010	N	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	10N13N2021	726	N	BYLC
137	SS	64	6	M	1189123	N	N	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	10N13N2021	727	USG ABDOMENN	NFES
138	KC	71	7	M	455304	N	N	N	HTN	Y	PLEURAL MASS BIOPSY	N	N	No Antifungals Given	N	SPUTUM	10N15N2021	733	HRCT CHESTN AGGRESSIVE	BYLC
139	NS	40	3	F	1189585	Y	Y	N	PULM KOCHS, ON ATT	N	N	N	N	No Antifungals Given	N	ET	10N19N2021	739	CHEST X RAYN RIGHT SIDED	BYLC

Sr No.	Name	Age	age group	Sex	Mrd No.	India Ink PrepARation	Latex AGglUTInation	Culture	POSA	Antifungal Susceptibility	1-3-beta-Glucan-Essay	FUNGITELL	GALACTOMANNAN		Galacto Mannan	Outcome
105	RSL	79	7	M	224764	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
106	JS	45	4	M	1170740	-	-	Rhizopus	-	-						PATIENT DISCHARGED
107	HK	67	6	F	1170000	-	-	Candida albicans	-	-	POS	POS	NEG	0.14 NEG	NEG	PATIENT DISCHARGED
108	SA	70	6	M	870760	-	-	C. Stellatoidea	-	-	-	-	-	-	-	DAMA
109	PDS	80	7	M	1173354	-	-	Candida Tropicalis	-	-	INDETERMINATE	INDETERMINATE	POS	0.93 POS	POS	DISCHARGE AT REQUEST
110	NS	70	6	M	1171914	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
111	BS	55	5	M	1175951	-	-	Aspergillus fumigatus +	-	PATIENT DISCHARGED						DAMA
112	VR	45	4	F	1153963	-	-	Aspergillus flavus	-	DENIED DUE TO FINANCIAL						PATIENT DISCHARGED
113	PN	80	7	F	1176040	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
114	PS	70	6	M	1164386	-	-	Candida ciferrii	-	VORICONAZOLE (S)<=0.12,	-	-	-	-	-	DAMA
115	S	69	6	F	1176203	-	-	Candida Tropicalis	-	-	NEG	NEG	NEG	0.35 NEG	NEG	PATIENT DISCHARGED
116	DSJ	71	7	M	1177765	-	-	Candida Tropicalis	-	-	-	-	-	-	-	DAMA
117	DS	60	5	M	1172257	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
118	JD	79	7	F	47619	-	-	Candida Tropicalis	-	-	-	-	NEG	0.29 NEG	NEG	PATIENT DISCHARGED
119	KN	62	6	M	1178878	-	-	Aspergillus flavus	-	PATIENT WAS RESPONDED	POS	POS	POS	1.25 POS	POS	PATIENT DISCHARGED
120	PK	55	5	M	1178793	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.18 NEG	NEG	PATIENT DISCHARGED
121	PK	55	5	M	1178793	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.18 NEG	NEG	PATIENT EXPIRED
122	RG	43	4	M	1179507	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
123	GD	80	7	F	657605	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
124	RS	49	4	M	1176033	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
125	R	19	1	F	1182427	-	-	C. Stellatoidea	-	-	-	-	-	-	-	DAMA
126	KK	80	7	F	1112689	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT EXPIRED
127	JS	39	3	M	1086517	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
128	PS	29	2	M	1181402	-	-	Aspergillus flavus	-	PATIENT DISCHARGED						PATIENT DISCHARGED
129	RP	58	5	M	1187162	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
130	AJ	60	5	M	1184653	-	-	Aspergillus fumigatus	-	PATIENT DISCHARGED						DAMA
131	SK	56	5	M	1183943	-	-	C. Stellatoidea	-	-	-	-	-	-	-	DAMA
132	JS	71	7	M	968629	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
133	KG	42	4	M	1186801	-	-	Aspergillus fumigatus	-	-			NEG	0.14 NEG	NEG	PATIENT DISCHARGED
134	KS	34	3	M	1187997	POSITIVE	NEGATIVE	Cryptococcus neoformans	-	-						DAMA
135	SS	88	8	M	1188730	-	-	C. Stellatoidea	-	-	INDETERMINATE	INDETERMINATE	NEG	0.37 NEG	NEG	DAMA
136	JS	30	2	M	1188010	-	-	Candida Tropicalis	-	-	POS	POS	POS	1.46 POS	POS	PATIENT DISCHARGED
137	SS	64	6	M	1189123	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
138	KC	71	7	M	455304	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
139	NS	40	3	F	1189585	-	-	Candida albicans	-	-	-	-	-	-	-	DISCHARGE AT REQUEST

Sr No.	Name	Age	age group	Sex	Mrd No.	ADMission No.	Date of ADMission	Date of DischARge	Hospital Days	Location	Provisional Diagnosis	ChiEF Complaints	VOMITING	HYPOTHYROIDISM	NAUSEA	FEVER	SOB	PAIN ABDOMEN	COUGH WITH EXPECTORATIO	COPD
140	SD	55	5	F	1193502	2021057237	19/10/2021	30/10/2021	12	PCCU	POST COVID, RF-II, SEPTIC	DOMESTIC FALL	N	N	N	N	Y	N	N	N
141	LR	42	4	M	1184287	2021053168	02/10/2021	31/10/2021	30	MEDICINE	SEPSIS, DM-II, FATTY LIVER	PRESENTED WITH DIABETIC	N	N	N	N	N	N	N	N
142	GS	17	1	F	1192291	2021056638	16/10/2021	25/10/2021	10	Chest	PULMONARY TB, CBNAAT	LOSS OF WEIGHT	N	N	N	Y	N	N	Y	N
143	VS	60	5	M	1196252	2021058391	23/10/2021	04/11/2021	13	MED. ICU	B/L PLEURAL EFFUSION,	DYSPNEA	N	N	N	Y	N	N	N	N
144	GD	68	6	F	1194153	2021057519	20/10/2021	02/11/2021	14	MEDICINE	COMPLICATED TROPICAL	LOOSE STOOLS	Y	N	N	Y	N	N	N	N
145	KK	64	6	F	1196520	2021058550	24/10/2021	29/10/2021	06	TRAUMA-ICU	ICH, PULM. EDEMA, FATTY	ALTERED SENSORIUM	N	N	N	N	N	Y	N	N
146	KS	30	2	M	1190078	2021055621	12/10/2021	09/11/2021	29	MEDICINE	FEVER, DENGUE,	FALL IN URINE OUTPUT	N	N	N	Y	N	N	N	N
147	DS	63	6	M	1141905	2021057190	18/10/2021	29/10/2021	12	HDU	CHRONIC OPIOID	ALTERED SENSORIUM,	N	N	N	N	Y	N	N	N
148	PK	66	6	F	1185359	2021059334	27/10/2021	06/11/2021	11	TRAUMA-ICU	A/H/O-RSA, MULTIPLE RIB	A/H/O-RSA, SUDDEN FALL	N	N	N	N	Y	N	N	N
149	GS	60	5	M	1198446	2021059468	27/10/2021	23/11/2021	28	Chest	DM-II, PULM. ZYGOMYCOSIS	-	Y	N	N	N	N	N	Y	N
150	SS	37	3	M	894740	2021059745	29/10/2021	04/11/2021	07	GAS-ICU	MILD TR WITH PASP=35MMG	NECROSECTON Y ,	N	N	N	N	N	Y	N	N
151	KS	92	9	F	1199143	2021059830	29/10/2021	10/11/2021	13	PCCU	HTN, HEART DISEASE, GTCS,	ABNORMAL BODY	N	N	N	N	N	N	N	N
152	A	57	5	F	1196664	2021058666	24/10/2021	12/11/2021	20	MEDICINE	HTN, HYPOTHYROID	-	N	Y	N	Y	Y	N	N	N
153	A	57	5	F	1196664	2021058666	24/10/2021	12/11/2021	20	MEDICINE	HTN, HYPOTHYROID	-	N	Y	N	Y	Y	N	N	N
154	DK	36	3	M	1201793	2021061093	03/11/2021	21/11/2021	19	MEDICINE	POST COVID, FUNGAL	LOWER LIMB PAIN	N	N	N	Y	Y	N	Y	N
155	RS	60	5	M	1205256	2021063326	12/11/2021	22/11/2021	11	PCCU	MOD. PAH, SEVERE TR, B/L	BLOOD IN SPUTUM, LOSS	N	N	N	N	Y	N	Y	N
156	KS	64	6	M	1201959	2021061182	03/11/2021	19/11/2021	17	GASTRO	DM-II, UPPER GI BLEED,	-	N	N	N	N	N	Y	N	N
157	BK	44	4	F	1204759	2021062510	09/11/2021	11/11/2021	03	EMG. ICU	DM-II, DENGUE,		Y	N	Y	Y	N	N	N	N
158	RS	60	5	M	1205256	2021063326	12/11/2021	22/11/2021	11	PCCU	MODERATE PAH, B/L	BLOOD IN SPUTUM, LOSS	N	N	N	Y	Y	N	Y	N
159	SS	60	5	M	1203327	2021061911	07/11/2021	19/11/2021	13	NS-ICU	A/H/O-FALL, SAH WITH	A/H/O-FALL, GENGRALISED	N	N	N	N	N	N	N	N
160	S	38	3	F	210826	2021062956	11/11/2021	17/11/2021	07	Chest	FATTY LIVER GRADE-I,	-	N	Y	N	Y	Y	N	Y	N
161	YK	67	6	F	1204173	2021062234	08/11/2021	24/11/2021	17	MEDICINE	COMPLICATED TROPICAL	POOR GCS, SEIZURES	N	N	N	N	Y	N	N	N
162	GK	32	3	F	1210939	2021478965	20/11/2021	08/12/2021	19	MEDICINE	AFI,TCP, MODS, SEPSIS	GENERALISED WEAKNESS,	N	N	N	Y	N	N	N	N
163	PK	39	3	M	1210539	2021065263	29/10/2021	27/11/2021	30	HDU	PLEURAL EFFUSION,	-	N	N	N	Y	Y	Y	N	N
164	PG	39	3	M	1200156	2021060245	30/10/2021	26/11/2021	28	MED. ICU	AKI, DENGUE FEVER, SHOCK,	PAIN ABDOMEN,	Y	N	N	Y	Y	N	N	N
165	RLG	54	5	M	1021952	2021065124	19/11/2021	03/12/2021	15	HDU	DM-II, CKD, LRTI, SEPSIS,	-	N	N	N	N	Y	N	N	N
166	GC	57	5	M	936058	2021065773	22/11/2021	26/11/2021	05	NEPHRO	DM-II, CAD, CKD, CAECAL	ADMITTED FOR AV	N	N	N	N	N	N	N	N
167	TK	61	6	F	1213258	2021066473	24/11/2021	29/12/2021	05	STROKE-ICU	HTN, UTI, CKD	TOXIC CLONIC SEIZURES	N	N	N	N	N	N	N	N
168	PL	65	6	M	1204197	2021062247	08/11/2021	28/11/2021	21	MED. ICU	DM-II, CKD, POST CRRT, RF-	-	N	N	N	Y	Y	N	Y	N
169	SR	62	6	F	1213275	2021066488	09/11/2021	02/12/2021	23	HDU	COPD, LRTI, SEPTIC SHOCK,	-	N	N	N	Y	Y	N	N	Y
170	AK	40	3	M	1213214	2021066445	24/11/2021	03/12/2021	10	GEN. SUR	A/H/O-RSA, PNEUMOCEPH	A/H/O-RSA	N	N	N	N	N	N	N	N
171	RP	87	8	M	1214464	2021066908	26/11/2021	03/12/2021	08	CARDIO	DM, HTN, SEPSIS, AKI,	-	N	N	N	Y	Y	N	N	N
172	RK	73	7	F	438581	2021067535	29/11/2021	04/12/2021	06	Chest	BA, RF-II, BRONCHIAL	-	N	N	N	N	Y	N	N	N
173	PS	86	8	F	878782	2021065445	20/11/2021	11/12/2021	22	CARDIO	HTN, DM, OLD CVA, ALTERED	ALTERED SENSORIUM	N	N	N	N	Y	N	N	N
174	DR	74	7	M	941877	2021066857	26/11/2021	14/12/2021	19	MEDICINE	DM-II, HTN, COPD, CKD,	-	N	N	N	N	Y	Y	Y	Y

Sr No.	Name	Age	age group	Sex	Mrd No.	CKD	HTN	DIABETES	OTHER	FLU	VORI	AMPHO	CASPO	MICA	FLUCY	ITRA	Drug History	UrinARy Catheterizatio	Central Line Insertion	Respiratory Ventilation
140	SD	55	5	F	1193502	N	N	N	N	-	-	-	-	-	-	-	TAB. VALPROATE	Y	N	Y
141	LR	42	4	M	1184287	N	N	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET	Y	N	Y
142	GS	17	1	F	1192291	N	N	N	N	-	-	-	-	-	-	-	ON ATT	Y	N	N
143	VS	60	5	M	1196252	N	Y	Y	N	-	-	-	-	-	-	-	N	Y	N	Y
144	GD	68	6	F	1194153	N	Y	N	N	-	-	-	-	-	-	-	TAB. ECOSPRIN 75MG	Y	Y	Y
145	KK	64	6	F	1196520	N	Y	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	Y	Y
146	KS	30	2	M	1190078	N	Y	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	N	Y
147	DS	63	6	M	1141905	N	Y	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	Y	Y
148	PK	66	6	F	1185359	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
149	GS	60	5	M	1198446	N	N	Y	N	-	-	-	-	-	-	-	TAB. METFORMIN	Y	N	Y
150	SS	37	3	M	894740	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
151	KS	92	9	F	1199143	N	Y	N	N	-	-	-	-	-	-	-	N	Y	N	Y
152	A	57	5	F	1196664	N	Y	N	N	-	-	-	-	-	-	-	TAB. THYROXINE	Y	N	Y
153	A	57	5	F	1196664	N	Y	N	N	-	-	-	-	-	-	-	TAB. THYROXINE	Y	N	Y
154	DK	36	3	M	1201793	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
155	RS	60	5	M	1205256	N	N	N	N	-	-	-	-	-	-	-	TAB. UDILIV 300MG, TAB.	Y	N	Y
156	KS	64	6	M	1201959	N	N	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET	Y	N	Y
157	BK	44	4	F	1204759	N	N	Y	N	-	-	-	-	-	-	-	INJ. INSULIN PLAIN	Y	Y	Y
158	RS	60	5	M	1205256	N	N	N	N	-	-	-	-	-	-	-	TAB. DIGOXIN 0.25MG	Y	N	Y
159	SS	60	5	M	1203327	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
160	S	38	3	F	210826	N	N	N	N	-	-	-	-	-	-	-	TAB. ELTROXIN 50MGM	Y	N	Y
161	YK	67	6	F	1204173	N	N	N	N	-	-	-	-	-	-	-	TAB. CARDACE 200MG	Y	N	Y
162	GK	32	3	F	1210939	N	N	N	N	-	-	-	-	-	-	-	TAB. LASIX 40MG	Y	Y	Y
163	PK	39	3	M	1210539	N	N	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	N	Y
164	PG	39	3	M	1200156	N	Y	N	N	-	-	-	-	-	-	-	N	Y	N	Y
165	RLG	54	5	M	1021952	Y	N	Y	N	-	-	-	-	-	-	-	TAB. ECOSPRINNAV	Y	N	Y
166	GC	57	5	M	936058	Y	N	Y	N	-	-	-	-	-	-	-	CAP. ECOSPRINNAV,	Y	N	N
167	TK	61	6	F	1213258	N	Y	N	N	-	-	-	-	-	-	-	SYP. PHENYTORIN	Y	N	Y
168	PL	65	6	M	1204197	Y	N	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET	Y	N	Y
169	SR	62	6	F	1213275	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
170	AK	40	3	M	1213214	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
171	RP	87	8	M	1214464	N	Y	Y	N	S	S	S	-	S	S	-	TAB. GLYCOMET	Y	N	Y
172	RK	73	7	F	438581	N	N	N	N	-	-	-	-	-	-	-	KNCNON BA, ON NEB WITH	Y	N	Y
173	PS	86	8	F	878782	N	Y	Y	N	S	S	S	S	S	-	-	TAB. MENOPERM,	Y	Y	Y
174	DR	74	7	M	941877	Y	Y	Y	N	-	-	-	-	-	-	-	TAB. TAZACT, TAB. PAN ES	Y	N	Y

Sr No.	Name	Age	age group	Sex	Mrd No.	Corticosteroid Use	Total Parental Nutrition	Peritoneal Dialysis	Underlying Co-Morbid	Diabetes Mellitus	Malignancy	HIV/AIDS	Others	No Antifungals Given	YES/NO ANTIFUNGALS	Specimen	Date	Lab id No	Radiological Findings	Direct Microscopy
140	SD	55	5	F	1193502	Y	Y	N	LRTI, SEPTIC SHOCK	N	N	N	N	No Antifungals Given	N	SPUTUM	10N21N2021	742	N	BYLC
141	LR	42	4	M	1184287	N	N	N	SEPSIS	Y	N	N	N	TAB. FLUCONAZOLE	YES	PUS	10N22N2021	743	N	NFES
142	GS	17	1	F	1192291	N	N	N	PULM. TB	N	N	N	N	N	N	BAL	10N22N2021	745	RIGHT LUNG CONSOLIDATI	NFES
143	VS	60	5	M	1196252	N	N	N	HTN, SEPSIS	Y	N	N	N	No Antifungals Given	N	SPUTUM	10N25N2021	753	MDCT CHESTN MODERATE	BYLC WITH PH
144	GD	68	6	F	1194153	N	Y	N	HTN	N	N	N	N	No Antifungals Given	N	ET	10N26N2021	757	N	NFES
145	KK	64	6	F	1196520	N	Y	N	HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	10N27N2021	759	HRCT CHESTN GROUND	NFES
146	KS	30	2	M	1190078	N	N	N	LRTI, HTN	N	N	N	N	VORICONAZOLE	YES	SPUTUM	10N27N2021	760	HRCT CHESTN CONSOLIDATI	NFES
147	DS	63	6	M	1141905	Y	N	N	HTN, RFNII	N	N	N	N	No Antifungals Given	N	SPUTUM	10N28N2021	762	N	BYLC
148	PK	66	6	F	1185359	N	N	N	TR WITH LV DYSFUNCTION	N	N	N	N	No Antifungals Given	N	ET	10N28N2021	765	HRCT CHESTN ANHNONRSA	NFES
149	GS	60	5	M	1198446	N	N	N	CVA	Y	N	N	N	ISAVUCONAZOLE,	YES	BAL	10N30N2021	770	USG CHESTN MILD	BYLC WITH PH
150	SS	37	3	M	894740	N	N	N	CLD, CHRONIC PANCREATITIS	N	N	N	N	No Antifungals Given	N	ET	11N1N2021	776	CECT CHESTN MILD BNL	BYLC
151	KS	92	9	F	1199143	N	Y	N	HTN, SDH, LRTI	N	N	N	N	VORICONAZOLE	YES	ET	11N2N2021	780	N	NFES
152	A	57	5	F	1196664	N	Y	N	HTN, HYPOTHYROID	N	N	N	N	VORICONAZOLE	YES	SPUTUM	11N3N2021	782	HRCT CHESTN SNO GROUND	NFES
153	A	57	5	F	1196664	N	Y	N	HTN, HYPOTHYROID	N	N	N	N	TAB. VORICONAZOL	YES	GASTRIC ASPIRATION	11N3N2021	783	USG ABDOMENN	NFES
154	DK	36	3	M	1201793	N	N	N	N	N	N	N	N	TAB. VORICONAZOL	YES	SPUTUM	11N10N2021	799	HRCT CHESTN BNL SCATERED	HYALINE ASEPTATT
155	RS	60	5	M	1205256	N	N	N	CHD	N	N	N	N	No Antifungals Given	N	SPUTUM	11N10N2021	800	CXRN BNL PLEURAL	BYLC WITH PH
156	KS	64	6	M	1201959	N	N	N	N	Y	N	N	N	N	N	ET	11N10N2021	801	HRCT CHESTN BNL PATHCY	NFES
157	BK	44	4	F	1204759	N	Y	N	AKI, INTUBATED,	Y	N	N	N	N	N	ET	11N11N2021	802	USG ABDOMENN	NFES
158	RS	60	5	M	1205256	N	N	N	CLD, CHRONIC ALCHOLIC	N	N	N	N	No Antifungals Given	N	SPUTUM	11N13N2021	809	CXRN BNL PLEURAL	BYLC
159	SS	60	5	M	1203327	Y	Y	N	N	N	N	N	N	No Antifungals Given	N	SPUTUM	11N13N2021	810	USG ABDOMENN	BYLC
160	S	38	3	F	210826	Y	N	N	HYPOTHYROIDISM	N	N	N	N	No Antifungals Given	N	SPUTUM	11N14N2021	813	N	NFES
161	YK	67	6	F	1204173	Y	N	N	DENGUE ENCEPHALOPA	N	N	N	N	N	N	ET	11N19N2021	827	USG NECKN MULTINODULA	NFES
162	GK	32	3	F	1210939	N	Y	N	MODS	N	N	N	N	FLUCONAZOLE, CANDID	YES	ET	11N22N2021	830	N	BYLC WITH PH
163	PK	39	3	M	1210539	N	N	N	CLD	N	N	N	N	No Antifungals Given	N	ET	11N23N2021	833	-	NFES
164	PG	39	3	M	1200156	N	N	N	AKI, MODS, SHOCK	N	N	N	N	FLUCONAZOLE	YES	ET	11N23N2021	834	N	NFES
165	RLG	54	5	M	1021952	N	N	N	LRTI, CKD	Y	N	N	N	VORICONAZOLE	YES	SPUTUM	11N24N2021	835	CT CHESTN CARDIOGENIC	BYLC WITH PH
166	GC	57	5	M	936058	N	N	Y	CAECAL CERCINOMA	Y	Y	N	N	N	N	SPUTUM	11N24N2021	836	N	BYLC WITH PH
167	TK	61	6	F	1213258	N	Y	Y	HTN, CKD, UTI	N	N	N	N	No Antifungals Given	N	ET	11N25N2021	841	USGN BNL PLEURAL	BYLC WITH PH
168	PL	65	6	M	1204197	N	N	N	ON ATT, CKD	Y	N	N	N	VORICONAZOLE,	YES	ET	11N25N2021	842	CT CHESTN RIGHT	BYLC
169	SR	62	6	F	1213275	Y	N	N	COPD	N	N	N	N	No Antifungals Given	N	SPUTUM	11N27N2021	846	MDCT CHESTN AREAS OF	BYLC WITH PH
170	AK	40	3	M	1213214	Y	Y	N	PREVIOUS TREATED TB	N	N	N	N	N	N	SPUTUM	11N30N2021	851	MRCT CHESTN MULTIPLE	BYLC WITH PH
171	RP	87	8	M	1214464	Y	N	N	HTN, AKI, SHOCK	Y	N	N	N	VORICONAZOLE	YES	SUCTION TIP	11N30N2021	852	USG CHESTN MILD AND	BYLC WITH PH
172	RK	73	7	F	438581	Y	N	N	BA	N	N	N	N	No Antifungals Given	N	SPUTUM	12N1N2021	854	N	NFES
173	PS	86	8	F	878782	N	N	N	HTN, OLD CVA	Y	N	N	N	ANIDULAFUNGIN	YES	SUCTION TIP	12N1N2021	855	USG CHESTN MILD AND	BYLC WITH PH
174	DR	74	7	M	941877	N	N	N	COPD	Y	N	N	N	N	N	SPUTUM	12N1N2021	856	N	BYLC WITH PH

Sr No.	Name	Age	age group	Sex	Mrd No.	India Ink PrepARation	Latex AGglUTInation	Culture	POSA	Antifungal Susceptibility	1-3-beta-Glucan-Essay	FUNGITELL	GALACTOMANNAN		Galacto Mannan	Outcome
140	SD	55	5	F	1193502	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
141	LR	42	4	M	1184287	-	-	Candida Tropicalis	-	-						PATIENT DISCHARGED
142	GS	17	1	F	1192291	-	-	Aspergillus flavus +	-	-						PATIENT DISCHARGED
143	VS	60	5	M	1196252	-	-	Candida albicans	-	-	-	-	-	-	-	DISCHARGE AT REQUEST
144	GD	68	6	F	1194153	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
145	KK	64	6	F	1196520	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
146	KS	30	2	M	1190078	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
147	DS	63	6	M	1141905	-	-	Candida Tropicalis	-	-	-	-	-	-	-	DISCHARGE AT REQUEST
148	PK	66	6	F	1185359	-	-	Candida Tropicalis	-	-	-	-	NEG	0.30 NEG	NEG	PATIENT DISCHARGED
149	GS	60	5	M	1198446	-	-	C. Stellatoidea	-	-	-	-	-	-	-	DISCHARGE AT REQUEST
150	SS	37	3	M	894740	-	-	C. Stellatoidea	-	-	-	-	-	-	-	DAMA
151	KS	92	9	F	1199143	-	-	C. Stellatoidea	-	-	-	-	POS	0.52 POS	POS	DAMA
152	A	57	5	F	1196664	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
153	A	57	5	F	1196664	-	-	Candida Tropicalis	-	-						PATIENT DISCHARGED
154	DK	36	3	M	1201793	-	-	Aspergillus flavus	-	PATIENT DISCHARGED			POS	4.28 POS	POS	DISCHARGE AT REQUEST
155	RS	60	5	M	1205256	-	-	Candida Tropicalis	-	-	-	-	-	-	-	DAMA
156	KS	64	6	M	1201959	-	-	Aspergillus flavus	-	-			POS	0.59 POS	POS	PATIENT DISCHARGED
157	BK	44	4	F	1204759	-	-	Aspergillus flavus +Mucor	-	-						PATIENT DISCHARGED
158	RS	60	5	M	1205256	-	-	Candida Tropicalis	-	-	-	-	-	-	-	DAMA
159	SS	60	5	M	1203327	-	-	Candida Tropicalis	-	-	NEG	NEG	NEG	0.45 NEG	NEG	PATIENT DISCHARGED
160	S	38	3	F	210826	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
161	YK	67	6	F	1204173	-	-	Aspergillus flavus	-	PATIENT DISCHARGED						DAMA
162	GK	32	3	F	1210939	-	-	C. Stellatoidea	-	-	-	-	POS	0.72 POS	POS	DISCHARGE AT REQUEST
163	PK	39	3	M	1210539	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
164	PG	39	3	M	1200156	-	-	C. Stellatoidea	-	-	POS	POS	POS	0.54 POS	POS	DAMA
165	RLG	54	5	M	1021952	-	-	C. Stellatoidea	-	-	NEG	NEG	NEG	0.10 NEG	NEG	PATIENT DISCHARGED
166	GC	57	5	M	936058	-	-	Aspergillus flavus	-	-						PATIENT DISCHARGED
167	TK	61	6	F	1213258	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
168	PL	65	6	M	1204197	-	-	Candida Tropicalis	-	-	POS	POS	NEG	0.31 NEG	NEG	DAMA
169	SR	62	6	F	1213275	-	-	Candida Tropicalis	-	-	NEG	NEG	NEG	0.25 NEG	NEG	PATIENT DISCHARGED
170	AK	40	3	M	1213214	-	-	Aspergillus fumigatus +	-	PATIENT DISCHARGED						DAMA
171	RP	87	8	M	1214464	-	-	Candida albicans	-	VORICONAZOLE-S,	POS	POS	POS	0.47 POS	POS	DAMA
172	RK	73	7	F	438581	-	-	Candida Tropicalis	-	-	-	-	-	-	-	DISCHARGE AT REQUEST
173	PS	86	8	F	878782	-	-	Candida albicans	-	VORICONAZOLE-S,	-	-	-	-	-	PATIENT EXPIRED
174	DR	74	7	M	941877	-	-	Aspergillus flavus +	-	-			POS	2.29 POS	POS	PATIENT DISCHARGED

Sr No.	Name	Age	age group	Sex	Mrd No.	ADMission No.	Date of ADMission	Date of DischARge	Hospital Days	Location	Provisional Diagnosis	ChiEF Complaints	VOMITING	HYPOTHYROIDISM	NAUSEA	FEVER	SOB	PAIN ABDOMEN	COUGH WITH EXPECTORATIO	COPD
175	MLJ	87	8	M	270710	2021067317	29/11/2021	06/12/2021	08	CARDIO	HTN, CAD, MODERATE LV	-	N	N	N	N	Y	N	N	N
176	NC	59	5	M	1215548	2021067464	29/11/2021	03/12/2021	05	GASTRO	REACTIVATION OF PULM. TB,	-	N	N	N	Y	Y	N	N	N
177	VK	65	6	M	1014106	2021068130	02/12/2021	13/12/2021	12	MEDICINE	DM-II, CHRONIC	HEMOPTYSIS	N	N	N	N	N	Y	N	Y
178	SC	85	8	M	516536	2021068666	04/12/2021	19/12/2021	16	EMG. ICU	BA, BACTERIAL+FU	RESTLESSNESS, DYSPNEA	N	N	N	Y	Y	N	N	N
179	JS	50	4	M	1147345	2021048577	27/11/2021	14/12/2021	18	HDU	DM-II, DIABETIC	PATIENT COME FOR DIABETIC	N	N	N	N	N	N	N	N
180	OP	70	6	M	1221065	2021036874	09/12/2021	13/12/2021	05	NEPHRO	DM-II, HTN, CKD, FLUID	LESS URINE OUTPUT	N	N	N	N	Y	N	N	N
181	MS	82	8	M	247400	2021067772	30/11/2021	16/12/2021	17	CARDIO	DM-II, HTN, CAD, LVF	GHABRAHAT	N	N	N	Y	Y	N	N	N
182	R	68	6	M	617642	2021067870	30/11/2021	30/12/2021	31	CARDIO	DM-II, HTN, COPD, CAD,	BACK PAIN	N	N	N	N	N	N	N	Y
183	MS	72	7	M	28860	2021070783	13/12/2021	20/12/2021	08	CARDIO	TYPE-II DM, CAD, RF-II	RESTLESSNESS, DYSPNEA	N	N	N	N	Y	N	N	N
184	AK	61	6	F	708917	2021071240	16/12/2021	20/12/2021	05	MEDICINE	OLD TREATED PULMONARY	GENERALISED WEAKNESS	N	N	N	Y	Y	N	Y	N
185	MC	60	5	M	1223441	2021070754	13/12/2021	28/12/2021	16	PCCU	TYPE-II RF, SEPSIS, ACUTE	GHABRAHAT	N	N	N	Y	Y	N	Y	N
186	RS	55	5	M	1223383	2021070729	13/12/2021	22/12/2021	10	MEDICINE	SEPSIS, LRTI, POST CPR	DECREASED IN URINE	Y	N	N	Y	Y	N	Y	N
187	RC	58	5	M	1200440	2021069670	31/10/2021	08/12/2021	08	CARDIO	TYPE-2 DM, CAD, SEPSIS	RESTLESSNESS	N	N	N	Y	N	N	N	N
188	SK	74	7	F	1225713	2021071785	17/12/2021	31/12/2021	15	FW	LARGE PERICARDIAL	RESTLESSNESS, DYSPNEA	N	N	N	Y	Y	N	N	Y
189	BS	56	5	M	1224062	2021071028	14/12/2021	01/01/2022	19	MED. ICU	TYPE-II DM, OPOID	GENERALISED BODY	N	N	N	Y	Y	N	Y	N
190	AS	80	7	M	1226728	2021072241	01/11/2021	27/11/2021	26	Chest	TYPE-II DM, DKA, RIGHT	RESTLESSNESS, DYSPNEA	N	N	N	Y	Y	N	Y	N
191	GK	33	3	M	1230357	2021074004	27/12/2021	29/12/2021	03	EMG. ICU	CHRONIC SMOKER, DM-	GENERALISED BODY	N	N	N	N	N	N	N	N
192	KL	80	7	M	55802	2021073508	25/12/2021	31/12/2021	07	CARDIO	HTN, OLD TREATED	DYSPNEA ON MILD	N	N	N	N	Y	N	N	N
193	RKG	72	7	M	1054142	2021074671	30/12/2021	02/01/2022	04	CARDIO	BPH, POST COVID, LV	WEAKNESS	N	N	N	N	Y	N	N	N
194	MKA	67	6	F	1075014	2022006442	03/02/2022	04/02/2022	02	NEPHRO	CKD, MOD. MR, LV	GENERALISED WEAKNESS	N	N	N	Y	Y	Y	N	N
195	DHS	83	8	M	921	2022006719	04/02/2022	09/02/2022	06	MEDICINE	HTN, UTI, BPH, SUPER ADDED	GENERALISED WEAKNESS	N	N	N	Y	Y	Y	N	N
196	GSB	72	7	M	426208	2022006163	02/02/2022	09/02/2022	08	CARDIO	DM-II, HTN, CAD	CAD,POST PTCA TO LAD,	N	N	N	N	N	N	N	N
197	SS	47	4	M	1245543	2022005225	28/01/2022	10/02/2022	14	MEDICINE	POST COVID, DM-II, HTN,	LEFT FACIAL PAIN	N	N	N	N	N	N	N	N
198	GG	62	6	F	745918	2022006728	04/02/2022	17/02/2022	14	PCCU	RF-II, POST COVID, LRTI	HEMATURIA	N	Y	N	Y	Y	N	N	N
199	HR	80	7	M	1252425	2022008191	11/02/2022	16/02/2022	06	MEDICINE	HTN, AIRWAY DYSFUNCTION,	BURNING MICTURATION	N	N	N	N	Y	N	Y	N
200	RK	32	3	F	1244916	2022004945	27/01/2022	23/02/2022	28	HDU	POST COVID, PUML. KOCHS,	WT LOSS AND LOSS OF	N	N	N	Y	Y	N	Y	N
201	I	25	2	M	1163648	2022008666	14/02/2022	14/02/2022	01	Chest	HYPOTHYROIDISM,	ADMITTED FOR	N	Y	N	Y	N	N	N	N
202	RKG	21	2	M	1227331	2022007894	10/02/2022	15/02/2022	06	ONCO MEDICINE	ALL, MUCORMYCOS	NASAL SWELLING	N	N	N	N	N	N	N	N
203	LD	43	4	F	1249420	2022006939	06/02/2022	26/02/2022	21	PL-SUR	SLE, CAD, APS, SEPSIS,	WT LOSS	N	Y	N	Y	N	Y	N	N
204	HS	58	5	M	168587	2022000435	03/01/2022	12/01/2022	10	NEURO-SUR	FUNGAL SEPSIS, EDEMA	HEADACHE	N	N	N	N	Y	N	N	N
205	ASG	69	6	M	1244675	2022004844	27/01/2022	23/02/2022	28	MED. ICU	CHRONIC ALCHOLIC,	RESTLESSNESS	Y	N	N	N	N	Y	N	N
206	KGS	77	7	M	1143785	2022009140	16/02/2022	22/02/2022	07	Chest	COPD, RF-II, SEPSIS, LRTI,	OSA	N	N	N	Y	Y	N	Y	Y
207	SK	54	5	M	1247015	2022008626	14/02/2022	23/02/2022	10	ENDO	DM-II, HTN, DIABETIC, OSA,	PND, ORTHOPNEA	N	Y	N	N	Y	N	N	N
208	BS	65	6	M	1264306	2022013032	05/03/2022	10/03/2022	06	HDU	DM-II, FUNGAL SEPSIS,	LOSS OF APPETITE,	N	N	N	Y	Y	N	N	N
209	RR	44	4	M	1257680	2022010675	23/02/2022	14/03/2022	20	MED. ICU	AKI, FUNGAL SEPSIS, CLD,	YELLOWNESS OF EYES, LESS	N	N	N	N	N	N	N	N

Sr No.	Name	Age	age group	Sex	Mrd No.	CKD	HTN	DIABETES	OTHER	FLU	VORI	AMPHO	CASPO	MICA	FLUCY	ITRA	Drug History	UrinARy Catheterizatio	Central Line Insertion	Respiratory Ventilation
175	MLJ	87	8	M	270710	N	Y	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	N	Y
176	NC	59	5	M	1215548	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
177	VK	65	6	M	1014106	N	N	Y	N	S	S	S	S	S	-	-	INJ. INSULIN	Y	Y	Y
178	SC	85	8	M	516536	N	N	Y	N	-	-	-	-	-	-	-	N	Y	Y	Y
179	JS	50	4	M	1147345	N	N	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET	Y	N	N
180	OP	70	6	M	1221065	Y	Y	Y	N	-	-	-	-	-	-	-	INJ. MIXTARD, TAB.	Y	N	Y
181	MS	82	8	M	247400	N	Y	Y	N	-	-	-	-	-	-	-	CAP. CARDACE, TAB.	Y	Y	Y
182	R	68	6	M	617642	Y	Y	Y	N	S	S	S	S	S	-	-	INJ. PLAIN INSULIN	Y	N	Y
183	MS	72	7	M	28860	N	N	Y	N	-	-	-	-	-	-	-	INJ. INSULIN	Y	Y	Y
184	AK	61	6	F	708917	N	N	Y	N	-	-	-	-	-	-	-	INJ. HUMAN MIXTARD	Y	N	N
185	MC	60	5	M	1223441	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	Y
186	RS	55	5	M	1223383	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	Y
187	RC	58	5	M	1200440	N	N	Y	N	-	-	-	-	-	-	-	TAB. AVASN20MG	Y	Y	Y
188	SK	74	7	F	1225713	N	Y	N	N	-	-	-	-	-	-	-	TAB. WYSOLONE,	Y	N	N
189	BS	56	5	M	1224062	N	N	Y	N	-	-	-	-	-	-	-	HUMAN INSULIN	Y	Y	Y
190	AS	80	7	M	1226728	N	N	Y	N	-	-	-	-	-	-	-	ON OHA'S	Y	Y	N
191	GK	33	3	M	1230357	N	N	Y	N	-	-	-	-	-	-	-	ON ATT, TAB. UDILIV 300MG	N	Y	N
192	KL	80	7	M	55802	N	Y	N	N	-	-	-	-	-	-	-	CAP. ECOSPRINNAV	Y	N	Y
193	RKG	72	7	M	1054142	N	N	N	N	-	-	-	-	-	-	-	CAP. URIMAX 0.4MG	Y	N	Y
194	MKA	67	6	F	1075014	Y	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
195	DHS	83	8	M	921	N	Y	N	N	-	-	-	-	-	-	-	TAB.AMALONG 2.5MG, CAP.	Y	N	Y
196	GSB	72	7	M	426208	N	Y	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET,	Y	N	Y
197	SS	47	4	M	1245543	N	Y	Y	N	-	-	-	-	-	-	-	TAB. AMALONG10G	Y	N	N
198	GG	62	6	F	745918	N	N	N	N	-	-	-	-	-	-	-	TAB, THYRONORM	Y	N	Y
199	HR	80	7	M	1252425	N	Y	N	N	-	-	-	-	-	-	-	TAB. DOLACIN 600MG, TAB.	Y	N	Y
200	RK	32	3	F	1244916	N	N	N	N	-	-	-	-	-	-	-	ON ATT	Y	N	Y
201	I	25	2	M	1163648	N	N	N	N	-	-	-	-	-	-	-	TAB. THYRONORM	N	N	N
202	RKG	21	2	M	1227331	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
203	LD	43	4	F	1249420	N	N	N	N	-	-	-	-	-	-	-	TAB. THYROXINE,	Y	Y	Y
204	HS	58	5	M	168587	N	Y	Y	N	-	-	-	-	-	-	-	TAB. AMALOG 5MG	Y	Y	Y
205	ASG	69	6	M	1244675	N	N	N	N	S	R	S	S	S	-	-	N	Y	Y	N
206	KGS	77	7	M	1143785	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
207	SK	54	5	M	1247015	N	Y	Y	N	-	-	-	-	-	-	-	TAB. AMALONG,	Y	N	Y
208	BS	65	6	M	1264306	N	N	Y	N	-	-	-	-	-	-	-	TAB. METFORMIN	Y	Y	N
209	RR	44	4	M	1257680	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	Y

Sr No.	Name	Age	age group	Sex	Mrd No.	Corticosteroid Use	Total Parental Nutrition	Peritoneal Dialysis	Underlying Co-Morbid	Diabetes Mellitus	Malignancy	HIV/AIDS	Others	No Antifungals Given	YES/NO ANTIFUNGALS	Specimen	Date	Lab id No	Radiological Findings	Direct Microscopy
175	MLJ	87	8	M	270710	N	N	N	CAD, HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	12N1N2021	857	AS PER NORMAL	BYLC WITH PH
176	NC	59	5	M	1215548	N	N	N	OLD PULM TB	N	N	N	N	No Antifungals Given	N	SPUTUM	12N2N2021	859	HRCT CHESTN CONSOLIDATI	BYLC WITH PH
177	VK	65	6	M	1014106	N	N	N	COPD, CHRONIC	Y	N	N	N	No Antifungals Given	N	BAL	12N9N2021	871	N	NFES
178	SC	85	8	M	516536	N	N	N	BA	N	N	N	N	INJ. CASPOFUNGIN	YES	ET	12N10N2021	873	N	NFES
179	JS	50	4	M	1147345	N	N	N	KNCNONHCC	Y	N	N	N	TAB. VORICONAZOL	YES	ET	12N10N2021	874	HRCT CHESTN LARGE	NFES
180	OP	70	6	M	1221065	N	N	N	HTN, LRTI, CKD	Y	N	N	N	No Antifungals Given	N	SPUTUM	12N10N2021	875	USG CHOLELITHIASI	BYLC WITH PH
181	MS	82	8	M	247400	N	N	N	HTN, CAD,	Y	N	N	N	FLUCONAZOLE	YES	SPUTUM	12N13N2021	881	HRCTNGROUN D GLASS HAZE	BYLC WITH PH
182	R	68	6	M	617642	N	Y	N	HTN, COPD	Y	N	N	N	FLUCONAZOLE	YES	SUCTION TIP	12N15N2021	884	N	BYLC
183	MS	72	7	M	28860	Y	N	N	CADNDVD, RFNII	Y	N	N	N	No Antifungals Given	N	SPUTUM	12N16N2021	887	N	BYLC
184	AK	61	6	F	708917	N	N	N	LRTI, SEPSIS	N	N	N	N	VORICONAZOL E	YES	SPUTUM	12N16N2021	889	HRCT CHESTN SCATTERED	BYLC WITH PH
185	MC	60	5	M	1223441	Y	N	N	SEPSIS, TYPENII RF	N	N	N	N	No Antifungals Given	N	SPUTUM	12N16N2021	890	FIBROSIS BILATERAL	BYLC WITH PH
186	RS	55	5	M	1223383	N	N	N	SEPSISN RFNI	N	N	N	N	FLUCONAZOLE	YES	ET	12N17N2021	891	CT HEADN HYPOXIC	BYLC
187	RC	58	5	M	1200440	N	N	N	CAD	Y	N	N	N	No Antifungals Given	N	URINE	12N18N2021	897	USG ABDOMENN	NFES
188	SK	74	7	F	1225713	Y	N	N	HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	12N22N2021	902	HRCT CHESTN ACTIVE	BYLC WITH PH
189	BS	56	5	M	1224062	N	N	N	CLD, OPOID ADDICIT	Y	N	N	N	FLUCONAZOLE	YES	SPUTUM	12N22N2021	904	CXRN UPPER LOBE	BYLC WITH PH
190	AS	80	7	M	1226728	N	N	N	DKA	Y	N	N	N	VORICONAZOL E	YES	SPUTUM	12N25N2021	907	N	BYLC WITH PH
191	GK	33	3	M	1230357	N	N	N	ON ATT	Y	N	N	N	No Antifungals Given	N	SPUTUM	12N29N2021	924	N	NFES
192	KL	80	7	M	55802	N	N	N	HTN, OLD KOCH'S	N	N	N	N	No Antifungals Given	N	SPUTUM	12N29N2021	925	PERINBRONCH OVASCULAR	BYLC WITH PH
193	RKG	72	7	M	1054142	N	N	N	BPH, POST COVID	N	N	N	N	No Antifungals Given	N	SPUTUM	12N31N2021	929	N	BYLC
194	MKA	67	6	F	1075014	N	N	N	CKD,MULTIPLE MYELOMA	N	N	N	N	N	N	SPUTUM	2N4N2022	107N2022	N	FUNGAL HYPHAE
195	DHS	83	8	M	921	N	N	N	HTN, BPH, UTI	N	N	N	N	No Antifungals Given	N	SPUTUM	2N5N2022	110N2022	HRCT CHESTN GROUND	BYLC WITH PH
196	GSB	72	7	M	426208	Y	N	N	CAD, HTN	Y	N	N	N	No Antifungals Given	N	SPUTUM	2N5N2022	111N2022	N	NFES
197	SS	47	4	M	1245543	N	N	N	HTN	Y	N	N	N	INJ. AMPHONB	YES	SINO NASAL MUCOSA	2N5N2022	114N2022	CT PNSN BNL MAXILLARY	ASPETATE FUNGAL
198	GG	62	6	F	745918	Y	N	N	HYPOTHYROIDI SM	N	N	N	N	No Antifungals Given	N	ET	2N5N2022	115N2022	N	NFES
199	HR	80	7	M	1252425	Y	N	N	HTN, UTI	N	N	N	N	No Antifungals Given	N	SPUTUM	2N11N2022	128N2022	CXRN BNL HOMGENOUS	BYLC WITH PH
200	RK	32	3	F	1244916	Y	N	N	PULM. KOCH, ON ATT	N	N	N	N	No Antifungals Given	N	SPUTUM	2N12N2022	132N2022	HRCT CHESTN CAVITATORY	BYLC WITH PH
201	I	25	2	M	1163648	N	N	N	HYPOTHYROIDI SM	N	N	N	N	N	N	BAL	2N14N2022	135N2022	HRCT CHESTN VIRAL	BYLC
202	RKG	21	2	M	1227331	N	N	N	N	N	Y	N	N	TAB. ISAVUCONAZO	YES	SINO NASAL MUCOSA	2N14N2022	137N2022	CT PNS AND CHESTN LEFT	NFES
203	LD	43	4	F	1249420	Y	N	N	SLE, CAD, APS	N	N	N	N	TAB. VORICONAZOL	YES	SKIN SCRAPPING	2N15N2022	139N2022	HRCT CHESTN	HYALINE ASEPTATT
204	HS	58	5	M	168587	N	N	N	HTN, PARKINSONIS	Y	N	N	N	TAB. VORICONAZOL	YES	SPHENOID MUCOSA	1N5N2022	14N2022	CT SCAN NOSE AND PNSN BNL	HYALINE ASEPTATT
205	ASG	69	6	M	1244675	N	N	N	ALCHOLIC	N	N	N	N	INJ. VORICONAZOL	YES	PANCREATIC FLUID	2N16N2022	146N2022	N	BYLC WITH PH
206	KGS	77	7	M	1143785	N	N	N	COPD	N	N	N	N	No Antifungals Given	N	SPUTUM	2N17N2022	147N2022	HRCT CHESTN BRONCHITIS	NFES
207	SK	54	5	M	1247015	N	N	N	HTN, OSA, HYPOTHYROIDI	Y	N	N	N	No Antifungals Given	N	SPUTUM	2N17N2022	150N2022	N	BYLC WITH PH
208	BS	65	6	M	1264306	N	N	N	N	Y	N	N	N	No Antifungals Given	N	SPUTUM	3N6N2022	182N2022	N	NFES
209	RR	44	4	M	1257680	N	Y	N	CLD	N	N	N	N	No Antifungals Given	N	ET	3N6N2022	183N2022	HRCT CHESTN GROUND	NFES

Sr No.	Name	Age	age group	Sex	Mrd No.	India Ink PrepARation	Latex AGglUTInation	Culture	POSA	Antifungal Susceptibility	1-3-beta-Glucan-Essay	FUNGITELL	GALACTOMANNAN		Galacto Mannan	Outcome
175	MLJ	87	8	M	270710	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
176	NC	59	5	M	1215548	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
177	VK	65	6	M	1014106	-	-	Candida Gullermondi	-	FLUCONAZOLE-S,	-	-	-	-	-	DAMA
178	SC	85	8	M	516536	-	-	Aspergillus fumigatus	-	PATIENT WAS RESPONDING	POS	POS	POS	0.96 POS	POS	DAMA
179	JS	50	4	M	1147345	-	-	Aspergillus flavus	-	PATIENT DISCHARGED						PATIENT DISCHARGED
180	OP	70	6	M	1221065	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
181	MS	82	8	M	247400	-	-	Candida Tropicalis	-	-	-	-	NEG	0.44 NEG	NEG	PATIENT EXPIRED
182	R	68	6	M	617642	-	-	Candida albicans	-	FLU-0.5 (S), VORI-S,	-	-	-	-	-	PATIENT DISCHARGED
183	MS	72	7	M	28860	-	-	Candida albicans	-	-	-	-	-	-	-	PATIENT DISCHARGED
184	AK	61	6	F	708917	-	-	Candida albicans	-	-	-	-	NEG	0.26 NEG	NEG	PATIENT DISCHARGED
185	MC	60	5	M	1223441	-	-	Candida albicans	-	-	NEG	NEG	NEG	0.23 NEG	NEG	DISCHARGE AT REQUEST
186	RS	55	5	M	1223383	-	-	Candida Tropicalis	-	-	-	-	-	-	-	DAMA
187	RC	58	5	M	1200440	-	-	Candida Tropicalis	-	-	INDETERMINATE	INDETERMINATE	NEG	0.30 NEG	NEG	PATIENT DISCHARGED
188	SK	74	7	F	1225713	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
189	BS	56	5	M	1224062	-	-	Candida Tropicalis	-	-	-	-	-	-	-	DISCHARGE AT REQUEST
190	AS	80	7	M	1226728	-	-	C .pseudotropica	-	-	-	-	-	-	-	PATIENT DISCHARGED
191	GK	33	3	M	1230357	-	-	Candida Tropicalis	-	-	-	-	NEG	0.08 NEG	NEG	DAMA
192	KL	80	7	M	55802	-	-	Candida albicans	-	-	POS	POS	POS	0.66 POS	POS	PATIENT DISCHARGED
193	RKG	72	7	M	1054142	-	-	Candida Tropicalis	-	-	POS	POS	POS	0.75 POS	POS	DISCHARGE AT REQUEST
194	MKA	67	6	F	1075014	-	-	Rhizopus	-	-	POS	POS	POS	0.66 POS	POS	DAMA
195	DHS	83	8	M	921	-	-	C. Stellatoidea	-	-	POS	POS	NEG	0.28 NEG	NEG	PATIENT DISCHARGED
196	GSB	72	7	M	426208	-	-	Candida albicans	-	-	-	-	-	-	-	PATIENT DISCHARGED
197	SS	47	4	M	1245543	-	-	Rhizopus	-	-						DAMA
198	GG	62	6	F	745918	-	-	Candida albicans	-	-	-	-	-	-	-	DISCHARGE AT REQUEST
199	HR	80	7	M	1252425	-	-	C. Stellatoidea	-	-	-	-	NEG	0.43 NEG	NEG	PATIENT DISCHARGED
200	RK	32	3	F	1244916	-	-	C. Stellatoidea	-	-	NEG	NEG	NEG	0.18 NEG	NEG	PATIENT DISCHARGED
201	I	25	2	M	1163648	-	-	Cryptococcus laurentii	-	-						PATIENT DISCHARGED
202	RKG	21	2	M	1227331	-	-	Mucor	-	-						PATIENT DISCHARGED
203	LD	43	4	F	1249420	-	-	Aspergillus flavus	-	PATIENT RESPONDED			NEG	0.29 NEG	NEG	PATIENT DISCHARGED
204	HS	58	5	M	168587	-	-	Aspergillus fumigatus	-	PATIENT GOT DISCHARGED			NEG	0.13 NEG	NEG	PATIENT DISCHARGED
205	ASG	69	6	M	1244675	-	-	Candida Tropicalis	-	FLUCONAZOLE-S,	POS	POS	NEG	0.24 NEG	NEG	PATIENT DISCHARGED
206	KGS	77	7	M	1143785	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
207	SK	54	5	M	1247015	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
208	BS	65	6	M	1264306	-	-	C. Stellatoidea	-	-	-	-	-	-	-	DISCHARGE AT REQUEST
209	RR	44	4	M	1257680	-	-	Candida Tropicalis	-	-	NEG	NEG	NEG	0.11 NEG	NEG	PATIENT EXPIRED

Sr No.	Name	Age	age group	Sex	Mrd No.	ADMission No.	Date of ADMission	Date of DischARge	Hospital Days	Location	Provisional Diagnosis	ChiEF Complaints	VOMITING	HYPOTHYROIDISM	NAUSEA	FEVER	SOB	PAIN ABDOMEN	COUGH WITH EXPECTORATIO	COPD
210	PCS	71	7	M	1266949	2022014172	12/03/2022	31/03/2022	20	MED. ICU	DM-II, SEPSIS	PAIN IN LOWER LIMB	N	N	N	N	N	N	N	N
211	MK	50	4	F	1266235	2022013858	08/03/2022	18/03/2022	11	MED. ICU	DM-II, SEPSIS WITH SHOCK,	BURNING MICTURATION	N	N	N	N	Y	N	N	N
212	MS	62	6	M	1232482	2022000001	01/01/2022	07/01/2022	07	CARDIO	HTN, MILD MR, RA, RV, MILD	CHEST PAIN	N	N	N	Y	N	N	N	N
213	VS	29	2	M	1229214	2021073433	24/12/2021	17/01/2022	25	EMG. ICU	ACUTE PANCREATITIS,	ALTERED SENSORIUM	N	N	N	N	Y	Y	N	N
214	KS	60	5	M	803911	2022000579	04/01/2022	13/01/2022	10	CARDIO	DILATED CARDIOMYOP	CHEST PAIN	N	N	N	N	Y	N	Y	N
215	LG	67	6	F	1208276	2021073954	27/12/2021	11/01/2022	16	MED. ICU	DM-II, HTN, RA, OLD CVA,	ALTERED SENSORIUM	N	N	N	N	Y	N	N	N
216	BS	55	5	M	1175951	2021057585	18/02/2022	24/02/2022	07	PCCU	toxic leukoencephal	LOSS OF CONSCIOUSNE	N	N	N	Y	Y	N	N	N
217	VR	45	4	F	1153963	2021047575	21/02/2022	23/02/2022	02	PL-SUR	FATTY LIVER, RSA CHRONIC	PRESENTED WITH A/H/O-	N	N	N	N	N	N	N	N
218	PN	80	7	F	1176040	2021096358	01/03/2022	15/03/2022	14	MEDICINE	DM-II, ACUTE EXACERBATIO	RESTLESSNESS, DYSPNEA	N	N	N	N	Y	N	N	N
219	PS	70	6	M	1164386	2022069874	01/03/2022	21/03/2022	21	Chest	HTN, LUNG ABSCESS WITH	GENERALISED WEAKNESS	N	N	N	Y	N	N	Y	N
220	S	69	6	F	1176203	2022069789	01-01-2022	17-01-2022	17	STROKE-ICU	LVH, HTN, SCLEROTIC	GENERALISED WEAKNESS	N	N	N	N	Y	N	N	N
221	DSJ	71	7	M	1177765	2022069730	01-01-2022	15-01-2022	12	ISOLATION	DM-II, ILD, LEFT MIDDLE	LOSS OF WEIGHT	N	N	N	Y	N	N	N	N
222	DS	60	5	M	1172257	2021069877	20-12-2021	01-01-2022	13	GEN. SUR	MILD TR, HTN, MILD	HERNIA REPAIR	N	N	N	N	N	N	N	N
223	JD	79	7	F	47619	2021050623	25-12-2021	15-01-2022	14	HDU	BA, RF-II, HF, UTI	CHEST PAIN	N	N	N	N	Y	N	Y	N
224	AM	62	6	M	1230960	2021047575	29-12-2021	16-01-2022	15	Medicine	POST COVID, DM-II, HTN,	RESTLESSNESS	N	N	N	Y	Y	N	N	N
225	C	48	4	M	1241183	2022069789	18-01-2022	09-02-2022	16	MED. ICU	DM-II, CKD, POST CRRT, RF-	GENERALISED WEAKNESS	N	N	N	Y	Y	N	Y	N
226	AG	29	2	M	1243303	2022069740	24-01-2022	06-02-2022	17	CARDIO	DM-II, HTN, CKD, FLUID	LESS URINE OUTPUT	N	N	N	N	Y	N	N	N
227	SL	65	6	M	1231458	2021074493	29-12-2021	16-01-2022	18	PCCU	POST COVID, DM-II, HTN,	GHABRAHAT	N	N	N	Y	Y	N	N	N
228	KSS	40	3	M	902198	2022069526	25-01-2022	11-02-2022	19	MEDICINE	AFI,TCP, MODS, SEPSIS	GENERALISED WEAKNESS,	N	N	N	Y	N	N	N	N
229	PL	64	6	F	732308	2022036478	30-01-2022	02-02-2022	20	MED. ICU	DM-II, CKD, POST CRRT, RF-	RESTLESSNESS	N	N	N	Y	Y	N	Y	N
230	HS	44	4	M	1246105	2022038955	30-01-2022	12-02-2022	21	STROKE-ICU	DM-II, HTN, CKD, FLUID	LESS URINE OUTPUT	N	N	N	N	Y	N	N	N
231	GD	70	6	F	1244245	2022004589	25-01-2022	07-02-2022	22	PCCU	POST COVID,PULMO	RESTLESSNESS	N	N	N	Y	Y	N	N	N
232	MS	22	2	M	1246257	2022037475	31-01-2022	07-02-2022	23	ISOLATION	DM-I, DKA, UTI, SEPTIC	GENERALIZED BODY	N	N	N	Y	Y	N	N	N

Sr No.	Name	Age	age group	Sex	Mrd No.	CKD	HTN	DIABETES	OTHER	FLU	VORI	AMPHO	CASPO	MICA	FLUCY	ITRA	Drug History	UrinARy Catheterizatio	Central Line Insertion	Respiratory Ventilation
210	PCS	71	7	M	1266949	N	Y	N	N	-	-	-	-	-	-	-	ON OHA'S	Y	Y	N
211	MK	50	4	F	1266235	N	Y	Y	N	-	-	-	-	-	-	-	ON OHA'S	Y	Y	Y
212	MS	62	6	M	1232482	N	Y	N	N	-	-	-	-	-	-	-	TAB. ATORVASTATI	Y	Y	Y
213	VS	29	2	M	1229214	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	Y
214	KS	60	5	M	803911	N	Y	N	N	-	-	-	-	-	-	-	N	Y	Y	Y
215	LG	67	6	F	1208276	N	Y	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET,	Y	N	Y
216	BS	55	5	M	1175951	N	N	N	N	-	-	-	-	-	-	-	N	Y	Y	Y
217	VR	45	4	F	1153963	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	N
218	PN	80	7	F	1176040	N	N	Y	N	-	-	-	-	-	-	-	TAB. GLMIPRIDENM	Y	Y	Y
219	PS	70	6	M	1164386	N	Y	N	N	-	S	S	-	-	-	-	TAB AMALONGNA	N	N	N
220	S	69	6	F	1176203	N	Y	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	Y	Y
221	DSJ	71	7	M	1177765	N	N	Y	N	-	-	-	-	-	-	-	TAB DYNAGLIPTIN	N	N	N
222	DS	60	5	M	1172257	N	Y	N	N	-	-	-	-	-	-	-	TAB. AMALONG	Y	N	Y
223	JD	79	7	F	47619	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
224	AM	62	6	M	1230960	N	Y	Y	N	-	-	-	-	-	-	-	TAB. ECOSPRINNAV	Y	Y	Y
225	C	48	4	M	1241183	Y	N	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET	Y	N	Y
226	AG	29	2	M	1243303	Y	Y	Y	N	-	-	-	-	-	-	-	INJ. MIXTARD, TAB.	Y	N	Y
227	SL	65	6	M	1231458	N	Y	Y	N	-	-	-	-	-	-	-	TAB. ECOSPRINNAV	Y	Y	Y
228	KSS	40	3	M	902198	N	N	N	N	-	-	-	-	-	-	-	TAB. LASIX 40MG	Y	Y	Y
229	PL	64	6	F	732308	Y	N	Y	N	-	-	-	-	-	-	-	TAB. GLYCOMET	Y	N	Y
230	HS	44	4	M	1246105	Y	Y	Y	N	-	-	-	-	-	-	-	INJ. MIXTARD, TAB.	Y	N	Y
231	GD	70	6	F	1244245	N	N	N	N	-	-	-	-	-	-	-	N	Y	N	Y
232	MS	22	2	M	1246257	N	N	Y	N	-	S	S	S	-	-	S	INJ. PLAIN INSULIN	Y	N	Y

Sr No.	Name	Age	age group	Sex	Mrd No.	Corticosteroid Use	Total Parental Nutrition	Peritoneal Dialysis	Underlying Co-Morbid	Diabetes Mellitus	Malignancy	HIV/AIDS	Others	No Antifungals Given	YES/NO ANTIFUNGALS	Specimen	Date	Lab id No	Radiological Findings	Direct Microscopy
210	PCS	71	7	M	1266949	N	N	N	N	N	N	N	N	INJ. CASPOFUNGIN	YES	TISSUE	3N10N2022	193N2022	N	HYALINE ASEPTATT
211	MK	50	4	F	1266235	Y	N	N	N	Y	N	N	N	VORICONAZOLE	YES	SUCTION TIP	3N15N2022	208N2022	HRCT CHESTN MINIMAL	BYLC
212	MS	62	6	M	1232482	N	Y	N	CAD, HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	1N6N2022	21N2022	N	NFES
213	VS	29	2	M	1229214	N	Y	N	N	N	N	N	N	N	N	ET	1N6N2022	22N2022	USG ABDOMENN	HYALINE ASEPTATT
214	KS	60	5	M	803911	Y	Y	N	HTN	N	N	N	N	TAB. VORICONAZOL	YES	SPUTUM	1N6N2022	23N2022	N	BYLC
215	LG	67	6	F	1208276	Y	N	N	HTN, OLD CVA	Y	N	N	N	VORICONAZOLE	YES	SPUTUM	1N6N2022	25N2022	N	NFES
216	BS	55	5	M	1175951	N	N	N	HTN	N	N	N	N	N	N	ET	2N19N2022	46N2022	N	BYLC
217	VR	45	4	F	1153963	N	N	N	N	N	N	N	N	N	N	TISSUE	2N25N2022	48N2022	USG ABDOMENNFA	BYLC WITH PH+ HYALINE
218	PN	80	7	F	1176040	Y	N	N	N	N	N	N	N	No Antifungals Given	N	ET	3N1N2022	49N2022	N	NFES
219	PS	70	6	M	1164386	N	N	N	HTN	N	N	N	N	No Antifungals Given	N	BAL	3N1N2022	51N2022	N	NFES
220	S	69	6	F	1176203	N	N	N	HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	3N1N2022	54N2022	N	BYLC
221	DSJ	71	7	M	1177765	N	N	N	CBNAAT +VE, ATT	Y	N	N	N	INTRACONAZOLE	YES	SPUTUM	3N3N2022	57N2022	HRCT CHESTNSNO	BYLC
222	DS	60	5	M	1172257	N	N	N	HTN	N	N	N	N	No Antifungals Given	N	SPUTUM	3N3N2022	59N2022	N	BYLC
223	JD	79	7	F	47619	Y	N	N	BA, HF	N	N	N	N	No Antifungals Given	N	SPUTUM	3N3N2022	60N2022	N	BYLC
224	AM	62	6	M	1230960	N	Y	N	HTN	Y	N	N	N	INJ. CASPOFUNGIN	YES	ET	1N4N2022	66N2022	USG CHESTNAS PER	BYLC
225	C	48	4	M	1241183	N	N	N	ON ATT, CKD	Y	N	N	N	VORICONAZOLE,	YES	ET	11N25N2021	73N2022	CT CHESTN RIGHT	BYLC
226	AG	29	2	M	1243303	N	N	N	HTN, LRTI, CKD	Y	N	N	N	No Antifungals Given	N	SPUTUM	12N10N2021	77N2022	USG CHOLELITHIASI	BYLC WITH PH
227	SL	65	6	M	1231458	N	Y	N	HTN	Y	N	N	N	INJ. CASPOFUNGIN	YES	ET	1N4N2022	8N2022	USG CHESTNAS PER	BYLC
228	KSS	40	3	M	902198	N	Y	N	MODS	N	N	N	N	FLUCONAZOLE, CANDID	YES	ET	11N22N2021	85N2022	N	BYLC WITH PH
229	PL	64	6	F	732308	N	N	N	ON ATT, CKD	Y	N	N	N	VORICONAZOLE,	YES	ET	11N25N2021	88N2022	CT CHESTN RIGHT	BYLC
230	HS	44	4	M	1246105	N	N	N	HTN, LRTI, CKD	Y	N	N	N	No Antifungals Given	N	SPUTUM	12N10N2021	92N2022	USG CHOLELITHIASI	BYLC WITH PH
231	GD	70	6	F	1244245	Y	N	N	POST COVID	N	N	N	N	FLUCONAZOLE	YES	ET	2N1N2022	97N2022	CT SCAN PULMONARY	NFES
232	MS	22	2	M	1246257	N	N	N	UTI, RTI, DKA	Y	N	N	N	TAB. VORICONAZOL	YES	ET	2N2N2022	99N2022	N	HYALINE ASEPTATT

Sr No.	Name	Age	age group	Sex	Mrd No.	India Ink PrepARation	Latex AGglUTInation	Culture	POSA	Antifungal Susceptibility	1-3-beta-Glucan-Essay	FUNGITELL	GALACTOMANNAN		Galacto Mannan	Outcome
210	PCS	71	7	M	1266949	-	-	Fusarium	-	-						PATIENT DISCHARGED
211	MK	50	4	F	1266235	-	-	Candida Tropicalis	-	FLUCONAZOLE-S,	INDETERMINATE	INDETERMINATE	NEG	0.19 NEG	NEG	PATIENT DISCHARGED
212	MS	62	6	M	1232482	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
213	VS	29	2	M	1229214	-	-	Aspergillus flavus	-	-	POS	POS	NEG	0.09 NEG	NEG	PATIENT DISCHARGED
214	KS	60	5	M	803911	-	-	Aspergillus flavus	-	PATIENT DISCHARGED	POS	POS	NEG	0.45 NEG	NEG	PATIENT DISCHARGED
215	LG	67	6	F	1208276	-	-	Candida Tropicalis	-	-	NEG	NEG	POS	0.73 POS	POS	DISCHARGE AT REQUEST
216	BS	55	5	M	1175951	-	-	Aspergillus fumigatus +	-	PATIENT DISCHARGED						DAMA
217	VR	45	4	F	1153963	-	-	Aspergillus flavus	-	DENIED DUE TO FINANCIAL						PATIENT DISCHARGED
218	PN	80	7	F	1176040	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
219	PS	70	6	M	1164386	-	-	Candida ciferrii	-	VORICONAZOLE (S)<=0.12,	-	-	-	-	-	PATIENT DISCHARGED
220	S	69	6	F	1176203	-	-	Candida Tropicalis	-	-	NEG	NEG	NEG	0.35 NEG	NEG	PATIENT DISCHARGED
221	DSJ	71	7	M	1177765	-	-	Candida Tropicalis	-	-	-	-	-	-	-	DAMA
222	DS	60	5	M	1172257	-	-	Candida Tropicalis	-	-	-	-	-	-	-	PATIENT DISCHARGED
223	JD	79	7	F	47619	-	-	Candida Tropicalis	-	-	-	-	NEG	0.29 NEG	NEG	PATIENT DISCHARGED
224	AM	62	6	M	1230960	-	-	Aspergillus fumigatus	-	-	POS	POS	NEG	0.47 NEG	NEG	DAMA
225	C	48	4	M	1241183	-	-	Candida Tropicalis	-	-	POS	POS	NEG	0.31 NEG	NEG	DAMA
226	AG	29	2	M	1243303	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
227	SL	65	6	M	1231458	-	-	Aspergillus fumigatus	-	-	POS	POS	NEG	0.47 NEG	NEG	DAMA
228	KSS	40	3	M	902198	-	-	C. Stellatoidea	-	-	-	-	POS	0.72 POS	POS	DISCHARGE AT REQUEST
229	PL	64	6	F	732308	-	-	Candida Tropicalis	-	-	POS	POS	NEG	0.31 NEG	NEG	DAMA
230	HS	44	4	M	1246105	-	-	C. Stellatoidea	-	-	-	-	-	-	-	PATIENT DISCHARGED
231	GD	70	6	F	1244245	-	-	Candida Tropicalis	-	-	POS	POS	NEG	0.11 NEG	NEG	PATIENT DISCHARGED
232	MS	22	2	M	1246257	-	-	Aspergillus flavus	S	VORICONAZOLE-S(0.12),			NEG	0.34 NEG	NEG	PATIENT DISCHARGED

SR.NO	MRD	AREA	LAB-ID	NAME	AGE	SEX	SPECIMEN	DATE OF SPECIMEN	DOA	DOD	HOSPITAL DAYS	B/C	FLUCON	VORI	AMPHO-B	CASPO	MICA	FLUCYTO	F/C	KOH	INDIA INK	LATEX AG	F/C	OTHERS	RADIO	PRO.DX.	FEVER	VOMITING
1	24196	MEDICINE	10588	R	30	F	B/C	30-07-2021	30-07-2021	07-08-2021	9	C.tropicalis	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	HYPODENSITY SEEN IN MIDDLE	AFI WITH SEPSIS, HEMIPARESIS L SIDE	YES	NO
2	55509	MEDICINE	11604	K	41	F	CSF	15-08-2021	11-08-2021	29-08-2021	18	cryptococcus	/	/	S	/	/	/	-	-	-	-	-	-	-	AFI,MENINGITIS	YES	NO
3	121087	PAEDIATRICS	18393	R	20	M	A/F	19-11-2021	10-11-2021	29-11-2021	19	C.tropicali	S	S	S	R	R	/	-	-	-	-	-	-	MOD.ASCITIS	AFI,SEPSIS,ASCITIS	YES	YES
4	156634	MEDICINE	12502	P	68	M	B/C	01-08-2021	31-07-2021	12-09-2021	42	C.tropicalis	R	R	S	S	S	/	-	-	-	-	-	-	LOWER BORDERS HAZINESS B/L LUNGS	COPD,DM-II,AFI,FUNGAL SEPSIS	YES	YES
5	404295	MEDICINE	15041	Y	74	M	B/C	30-09-2021	19-09-2021	20-10-2021	29	C.tropicalis	S	S	S	S	S	/	-	-	-	-	-	-	NO	OBSTRUCTIVE UROPATHY,SEIZURES DECOMPRESS	NO	NO
6	624437	SURGERY	13406	S	64	M	PCN	07-10-2021	05-10-2021	06-10-2021	1	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	NO	AFI,FUNGAL,SEPSIS,LRTI	YES	NO
7	634637	PAEDIATRICS	477/2022	K	3	M	B/C	10-01-2022	10-01-2022	13-01-2022	4	C.pelliculos	R	S	S	/	/	/	-	-	-	-	-	-	/	AFI WITH SEPSIS	YES	/
8	695085	MEDICINE	12352	HS	68	M	B/C	27-08-2021	19-08-2021	29-08-2021	11	C.tropicali	R	R	S	S	S	/	-	-	-	-	-	-	NO	HTN,AFI,FUNGAL SEPSIS	YES	YES
9	752055	MEDICINE	20203	JS	65	M	B/C	26-12-2021	25-12-2021	27-12-2021	3	C.tropicali	R	R	S	S	S	/	-	-	-	-	-	-	-	BRONCHOGENIC CARCINOMA	NO	NO
10	790849	HDHI	18642	AR	34	F	B/C	28-11-2021	26-11-2021	30-11-2021	5	C.guilliermo	S	S	S	S	S	SS	-	-	-	-	-	-	LOWER BORDER	RHEUMATIC HEART DISEASE,	YES	NO
11	815247	MEDICINE	4517	RKA	66	M	B/C	01-04-2021	31-03-2021	14-04-2021	15	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	BURNING	RENAL PARENCHY	HTN,.DM,CKD,PCA BG,UTI SEPSIS	YES	NO
12	912366	MEDICINE	6961	MK	70	M	B/C	07-05-2021	03-05-2021	28-05-2021	26	C.tropicali	S	S	S	S	S	/	-	BYLCPH	NEG	NEG	NO	NO	NO	LRTI ,UTI,OLD CVA CKD DM II HTN	YES	NO
13	928807	MEDICINE	10012	CK	67	F	B/C	21-07-2021	07-07-2021	25-07-2021	19	C.tropicali	R	R	S	S	S	/	-	NO	NEGATIVE	NEG	NO	BURNING	NO	UTI WITH SEPSIS	YES	NO
14	968513	MEDICINE	7197	SS	20	M	B/C	31-05-2021	28-05-2021	18-06-2021	22	C.tropicali	S	S	S	S	S	/	-	NFES	NO	NO	NO	NO	HAZINESS B/L LUNGS	POST COVID LRTI	YES	NO
15	988692	ONCOLOGY	14542	KS	24	M	B/C	28-06-2021	18-06-2021	15-07-2021	27	C.tropicali	R	R	S	S	S	/	-	-	-	-	-	-	NO	AML,AFI,SEPSIS	YES	NO
16	1032971	ICU	1419/2022	VK	56	M	PCN	30-01-2022	26-01-2021	01-02-2021	6	C.tropicali	S	S	R	S	S	/	-	-	-	-	-	-	-	DM-II, DKA, UTI SEPSIS, RIGHT	YES	YES
17	1038695	MEDICINE	5051	RKS	57	M	B/C	11-04-2021	01-04-2021	15-04-2021	14	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	NO	AFI,SEPSIS	YES	NO
18	1050833	ICU	4316	RS	45Y	M	B/C	21-03-2021	13-03-2021	29-06-2022	76	C.parapsilo	S	S	S	S	S	S	-	NFES	NO	NO	NO	NO	NO	AFI WITH FUNGAL SEPSIS	YES	NO
19	1051005	MEDICINE	3763	JS	38Y	M	B/C	15-03-2021	14-03-2021	15-03-2021	2	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	NO	AFI WITH SEPSIS	YES	NO
20	1060418	PAEDIATRICS	6536	AK	3	M	B/C	19-05-2021	17-05-2021	21-06-2021	36	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	NO	K/C/O BURKITTS LYMPHOMA WITH	YES	YES
21	1064866	ICU	12631	RJ	66	M	B/C	31-08-2021	31-08-2021	17-09-2021	18	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	NO	SEPSIS	YES	NO

SR.NO	MRD	BACK PAIN	PAIN ABDOME	SOB	COUGH	EXPECTORATIO	HTN	DM-II	CKD	OTHERS	DRUG HISTORY	RISK FACTORS	URINARY CATHETER	C/L	VENTILATION	STEROID	TPN	DIALYSIS	MALIGNANCY	HIV	ANTIFUNGAL T/T	OUTCOME	GLACTOMANN	POS/NEG	FUNGITEL	POS/NEG
1	24196	NO	NO	NO	YES	NO	YES	NO	NO	WEAKNESS OF L SIDE	NO	YES	YES	YES	NO	NO	NO	NO	NO	NR	INJ.CASPOFUNGIN	D/C	-	-	-	-
2	55509	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOLE	D/C	-	-	-	-
3	121087	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	-	-	-	-
4	156634	NO	NO	YES	YES	YES	NO	YES	NO	NO	OHA	YES	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZOLE	DAMA	0.14	NEG	-	-
5	404295	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOLE	D/C	-	-	-	-
6	624437	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	1.03	POS	-	-
7	634637	/	/	/	YES	/	/	/	/	-	-	NO	NO	NO	NO	NO	NO	NO	NO	-	FLUCONAZOL	D/C	-	-	-	-
8	695085	NO	NO	NO	NO	NO	YES	NO	NO	NO	AMLONG	NO	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZO	D/C	-	-	-	-
9	752055	NO	NO	NO	NO	NO	NO	NO	NO	-	-	NO	NO	NO	NO	NO	NO	NO	NO	-	-	D/C	-	-	-	-
10	790849	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	YES	YES	YES	YES	NO	NO	NO	NO	NR	VORICONAZO	D/C	-	-	-	-
11	815247	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	YES	YES	YES	YES	NO	NO	NO	NR	NO	D/C	-	-	-	-
12	912366	YES	YES	YES	YES	YES	YES	YES	YES	NO	AMLONG	NO	YES	YES	YES	YES	NO	YES	NO	NR	NO	EXPIRED	-	-	-	-
13	928807	NO	NO	NO	NO	NO	YES	YES	NO	NO	AMLONGAND	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	0.37	NEG	-	-
14	968513	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-
15	988692	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	-	-	-	-
16	1032971	/	/	YES	/	/	/	YES	YES	DECREASED URINE	-	NO	NO	NO	NO	NO	NO	NO	NO	-	/	DAMA	-	-	-	-
17	1038695	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	NO	D/C	1.15	POS	50.7	NEG
18	1050833	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	YES	YES	YES	NO	NO	NO	NO	NR	NO	D/C	-	-	-	-
19	1051005	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	NO	D/C	-	-	-	-
20	1060418	NO	YES	NO	NO	NO	NO	NO	NO	NO	POST CHEMO	MALIGNANCY	YES	NO	YES	NO	YES	NO	YES	NO	NO	D/C	0.41	NEG	255	POS
21	1064866	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	-	-	-	-

SR.NO	MRD	AREA	LAB-ID	NAME	AGE	SEX	SPECIMEN	DATE OF SPECIMEN	DOA	DOD	HOSPITAL DAYS	B/C	FLUCON	VORI	AMPHO-B	CASPO	MICA	FLUCYTO	F/C	KOH	INDIA INK	LATEX AG	F/C	OTHERS	RADIO	PRO.DX.	FEVER	VOMITING
22	1077221	MEDICINE	4846	GH	56	M	B/C	07-04-4021	06-04-2021	15-04-2021	10	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	NO	AFI WITH SEPSIS	YES	NO
23	1078145	MED	7409	HS	27	M	CSF	04-06-2021	03-06-2021	08-06-2021	6	cryptococc	/	/	R	/	/	/	-	NFES	POS	NEG	NO	NO	NO	POST COVID HIVE+, HBS AG +	YES	YES
24	1080088	MEDICINE	5042	AK	66	M	B/C	10-04-2021	10-04-2021	01-05-2021	21	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	BURNING	-	AFI,SEPSIS	YES	YES
25	1085550	MEDICINE	5082	VLG	66	F	B/C	25-04-2021	14-04-2021	10-05-2021	27	C.albicans	S	S	S	S	S	S	-	NO	NO	NO	NO	NO	NO	AFI,SEPSIS	YES	NO
26	1086517	ICU	14606	JS	40	M	B/C	29-0-2021	29-08-2021	08-10-2021	41	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	NO	LGBS, AFI AND SEPSIS	YES	NO
27	1089499	ICU	6370	NJ	1	F	B/C	13-05-2021	18-04-2021	17-06-2021	61	C.albicans	S	R	S	S	S	S	-	NO	NO	NO	NO	NO	NO	PREMATURE BABY WITH FEVER	YES	NO
28	1101841	MEDICINE	6035	SK	71	F	B/C	04-05-2021	03-05-2021	04-05-2021	2	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	NO	AFI ,FUNGAL SEPSIS	YES	NO
29	1102733	MEDICINE	6182	K	26	M	B/C	08-05-2021	04-05-2021	09-05-2021	6	C.albicans	S	S	S	S	S	S	-	NO	NO	NO	NO	NO	NO	FUNGAL SPESIS	YES	NO
30	1102883	ICU	6072	SK	71	F	B/C	04-05-2021	04-05-2022	23-05-2022	20	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	NO	AFI ,FUNGAL SEPSIS	YES	NO
31	1108806	MEDICINE	7383	PK	16	M	B/C	04-06-2021	15-05-2021	08-06-2021	23	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	NO	ALL PH POSTIVIE	YES	NO
32	1108856	MEDICINE	6447	BK	48	F	B/C	15-05-2021	15-05-2021	28-05-2021	14	C.albicans	S	S	S	S	S	S	-	NO	NO	NO	NO	NO	NO	UTI WITH SEPSIS	YES	NO
33	1108856	MEDICINE	7086	BK	48	F	B/C	29-05-2021	15-05-2021	28-06-2021	45	Tricosporon	/	/	/	/	/	/	-	NO	NO	NO	NO	NO	NO	UTI WITH SEPSIS	YES	NO
34	1109251	MEDICINE	7033	SWB	55	M	B/C	28-05-2021	16-05-2021	01-06-2021	17	C.tropicalis	S	S	S	S	S	/	-	BYLCPH	NO	NO	ASPFLAVUS	NO	CKD,RENAL PARENCHY	FUNGAL PNEUMONIA ,CKD UTI SEPSIS	YES	NO
35	1109946	MEDICINE	7218	MR	32	F	B/C	01-06-2021	17-05-2021	19-06-2021	34	C.tropicali	R	S	S	S	S	/	-	NFES	NEG	NO	NO	NO	NO	UTI WITH SEPSIS	YES	NO
36	1110381	MEDICINE	6586	JS	46	M	B/C	18-05-2021	18-05-2021	20-05-2021	3	C.lusitaniae	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	FATTY LIVER GRADE-2	JAUNDICE , HTN, DMII WITH SEPSIS	YES	NO
37	1110701	SURGERY	6835	D	38	M	B/C	24-05-2021	19-05-2021	27-05-2021	9	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	MULTIPLE FRACTURE	RSA UTI WITH SEPSIS	YES	NO
38	1114293	MEDICINE	7136	JS	41	M	B/C	30-05-2021	28-05-2021	28-06-2021	32	C.parapsilo	R	S	S	S	R	S	-	NO	NO	NO	NO	NO	NO	STROKE WITH UTI, AFI SEPSIS	YES	NO
39	1115760	PAEDIATRICS	10112	JS	3	M	B/C	12-07-2021	07-07-2021	13-08-2021	38	C.tropicali	R	R	S	S	S	/	-	NO	NO	NO	NO	-	-	-	-	-
40	1116061	ICU	7257	J	33	F	B/C	01-06-2021	01-06-2021	03-06-2021	3	C.albicans	S	S	S	S	S	S	-	NO	NO	NO	NO	NO	CKD,RENAL	POST DIALYSIS CKD WITH	YES	NO
41	1126201	MEDICINE	8499	BSB	59	M	B/C	24-06-2021	22-06-2021	13-07-2021	22	C.tropicali	S	S	S	S	S	/	-	BYLCPH	NO	NO	NO	NO	PNEUMONITIS	FUNGAL PNEUMONIA LRTI	YES	NO
42	1131066	MEDICINE	10439	KS	36	M	B/C	28-07-2021	02-07-2021	21-08-2021	51	C.auris	/	/	/	/	/	/	-	NO	NO	NO	NO	NO	S/O PULMONA	PULMONARY TB, ON ATT,ATT	YES	YES
43	1137024	MEDICINE	9792	BSB	59	M	BILE	16-07-2021	22-06-2021	13-07-2021	22	C.albicans	S	S	S	S	S	S	-	BYLCPH	NO	NO	NO	NO	PNEUMONITIS	FUNGAL PNEUMONIA LRTI	YES	NO

SR.NO	MRD	BACK PAIN	PAIN ABDOME	SOB	COUGH	EXPECTORATIO	HTN	DM-II	CKD	OTHERS	DRUG HISTORY	RISK FACTORS	URINARY CATHETER	C/L	VENTILATION	STEROID	TPN	DIALYSIS	MALIGNANCY	HIV	ANTIFUNGAL T/T	OUTCOME	GLACTOMANN	POS/NEG	FUNGITEL	POS/NEG
22	1077221	NO	NO	YES	YES	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NR	NO	D/C	-	-	-	-
23	1078145	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	R	NO	DAMA	0.91	POS	523	POS
24	1080088	NO	YES	NO	NO	NO	NO	YES	NO	NO	NO	DM	YES	NO	NO	NO	NO	NO	NO	NR	NO	D/C	0.55	POS	89.9	POS
25	1085550	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	NO	DAMA	-	-	-	-
26	1086517	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	-	-	-	-
27	1089499	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	-	NO	D/C	-	-	-	-
28	1101841	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	NO	D/C	0.31	NEG	-	-
29	1102733	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	0.25	NEG	-	-
30	1102883	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	NO	D/C	-	-	-	-
31	1108806	NO	YES	NO	NO	NO	NO	NO	NO	FOR 4RTH CHEMO	POST CHEMO	MALOGNANCY	NO	NO	NO	NO	NO	NO	ALL	NR	NO	D/C	-	-	-	-
32	1108856	YES	YES	NO	NO	NO	YES	NO	NO	BURNING MICTURICTION	T AMLONG	HTN	YES	NO	NO	NO	NO	NO	NO	NO	NO	D/C	-	-	-	-
33	1108856	NO	YES	NO	NO	NO	YES	NO	NO	BURNING MICTURICTION	AMLONG	NO	YES	NO	NO	NO	NO	NO	NO	NR	NO	D/C	1.03	POS	222	POS
34	1109251	NO	YES	YES	YES	YES	YES	YES	YES	NO	URIMAX	NO	YES	NO	YES	YES	NO	YES	NO	NR	VORICINAZOLE	D/C	0.08	NEG	-	-
35	1109946	NO	YES	YES	YES	YES	NO	NO	NO	ALTERED SENSORIU	NO	NO	YES	NO	NO	NO	NO	NO	NO	NR	NO	D/C	-	-	-	-
36	1110381	NO	YES	YES	YES	NO	YES	YES	NO	JAUNDICE	T ATORVASTATIN	NO	YES	NO	NO	YES	NO	NO	NO	NR	ISAVUCONAZOLE	D/C	1.25	POS	-	-
37	1110701	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NR	NO	D/C	0.1	NEG	-	-
38	1114293	NO	YES	NO	NO	NO	YES	YES	NO	ALTERED SENSORIU	AMLONG	NO	YES	NO	NO	NO	NO	NO	NO	NR	NO	D/C	-	-	-	-
39	1115760	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NO	D/C	0.58	POS	461	POS
40	1116061	YES	YES	YES	YES	YES	YES	NO	YES	NO	NO	NO	YES	NO	NO	NO	NO	YES	NO	NR	ISAVUCONAZO	D/C	1.16	POS	523	POS
41	1126201	YES	NO	YES	YES	YES	YES	YES	NO	NO	AMLONG	NO	YES	YES	YES	YES	NO	NO	NO	NO	VORICONAZO	DAMA	0.09	NEG	56.4	NEG
42	1131066	YES	NO	YES	YES	YES	NO	NO	NO	NO	ON ATT	YES	YES	NO	YES	NO	NO	NO	NO	NR	INJ.CASPOFUN	DAMA	-	-	-	-
43	1137024	YES	NO	YES	YES	YES	YES	YES	NO	NO	AMLONG	NO	YES	YES	YES	YES	NO	NO	NO	NO	VORICINAZOL	DAMA	-	-	-	-

SR.NO	MRD	AREA	LAB-ID	NAME	AGE	SEX	SPECIMEN	DATE OF SPECIMEN	DOA	DOD	HOSPITAL DAYS	B/C	FLUCON	VORI	AMPHO-B	CASPO	MICA	FLUCYTO	F/C	KOH	INDIA INK	LATEX AG	F/C	OTHERS	RADIO	PRO.DX.	FEVER	VOMITING
44	1137111	MEDICINE	15024	RS	39	M	B/C	05-10-2021	27-09-2021	08-10-2021	12	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	NO	HTN,COPD,AFI,SEPSIS	YES	NO
45	1137111	MEDICINE	15114	RS	39	M	A/F	07-10-2021	27-09-2021	08-10-2021	12	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	LOWER BORDERS	AFI,SEPSIS,LRTI	YES	NO
46	1138827	MEDICINE	1558/2022	RV	69	M	B/C	02-02-2022	01-02-2021	14-02-2021	14	C.glabrata	/	S	S	S	S	/	-	-	-	-	-	-	CORADS-II, RIGHT AND LEFT	HTN,OLD CVA,RECURRENT UTI,CKD,SEPSIS-	/	/
47	1145738	MEDICINE	10909	SS	59	M	BILE	04-08-2021	14-08-2021	28-08-2021	15	C.tropicalis	R	S	S	R	R	/	-	NO	NO	NO	NO	NO	PANCREATIC TUMOR	CA PANCREAS, GHK OF LV, MOD LV DYSTOLIC	YES	NO
48	1147235	MEDICINE	11981	SS	63	M	CENTRAL	21-08-2021	03-08-2021	28-08-2021	26	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	LOWER BORDERS	HTN,AFI,FUNGAL SEPSIS	YES	YES
49	1147321	PAEDIATRICS	11779	FA	5	M	B/C	18-08-2021	03-08-2021	21-08-2021	19	C.tropicali	S	S	S	S	S	/	NOT DON	NOT DON	NO	NO	NO	NO	NO	ALL,AFI,FUNGAL SEPSIS	YES	YES
50	1147819	SURGERY	11177	GK	56	F	PCD	08-08-2021	03-08-2021	15-08-2021	13	C.tropicalis	S	S	S	S	S	/	-	BYLC+PH	NO	NO	NO	NO	CHOLELITHIASIS, PUJ OBSTRUCT	DM,CHOLELITHIASIS,LEFT PUJ OBSTRUCTION,	YES	NO
51	1150393	MEDICINE	11590	HS	30	M	B/C	15-05-2021	26-08-2021	16-09-2021	22	C.guilliermondii	R	S	S	S	S	S	-	NO	NO	NO	NO	NO	AC.NECROTIZING PANCREAT	AFI WITH SEPSIS, AC PANCREATITIS	YES	YES
52	1150459	ICU	12662	AK	49	M	CENTRAL	01-09-2021	08-08-2021	21-09-2021	45	C.parapsilo	R	R	S	S	S	S	-	-	-	-	-	-	IVH	IVH,POST EVD,POST	YES	YES
53	1150529	MEDICINE	11421	VK	44	M	B/C	12-08-2021	08-08-2021	26-08-2021	19	C.tropicali	R	S	S	S	S	/	-	NO	NO	NO	NO	NO	NO	AFI WITH SEPSIS	YES	NO
54	1150651	MEDICINE	11180	MK	49	F	B/C	09-08-2021	08-08-2021	10-08-2021	3	C.tropicali	S	S	S	S	S	/	-	NO	NO	NO	NO	NO	NO	AFI ,FUNGAL SEPSIS	YES	NO
55	1153271	MEDICINE	11983	GS	39	M	B/C	20-08-2021	12-08-2021	30-08-2021	1	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	NO	AFI,FUNGAL SEPSIS	YES	NO
56	1156386	MEDICINE	12345	S	63	M	B/C	27-08-2021	17-08-2021	03-09-2021	18	C.auris	/	/	/	/	/	/	-	-	-	-	-	-	NO	AFI,SEPSIS	YES	NO
57	1160051	NEPHROLOGY	13315	GS	59	M	CAPD FLUID	10-09-2021	13-09-2021	16-09-2021	4	C.parapsilo	S	S	S	S	S	S	-	-	-	-	-	-	MILD ASCITES,B/	PL-HIV,DM-II,HTN,CKD,AFI,SE	YES	YES
58	1160051	NEPHROLOGY	13598	GS	59	M	PERITONEA	14-09-2021	13-09-2021	16-09-2021	4	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	MILD ASCITES,B/	PL-HIV,DM-II,HTN,CKD	YES	YES
59	1160461	MEDICINE	12415	BB	40	M	D/F	28-08-2021	24-08-2021	09-09-2021	17	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	MILD ASCITIS	AFI,SEPSIS,ASCITIS	YES	YES
60	1161146	MEDICINE	13075	MG	35	M	A/F	06-09-2021	05-09-2021	10-09-2021	6	C.albicans	S	S	S	S	S	S	-	-	-	-	-	-	ASCITIS	CLD,FUNGAL SEPSIS	YES	NO
61	1163051	ICU	13090	GS	71	M	B/C	07-09-2021	28-08-2021	21-09-2021	25	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	NO	CKD,DM-II,AFI,FUNGAL	YES	YES
62	1163333	ONCOLOGY	14580	BS	42	M	B/C	28-09-2021	28-09-2021	14-10-2021	17	C.guilliermm	S	S	S	S	S	S	-	-	-	-	-	-	NO	APLASTIC ANEMIA,AFI,SEPSI	YES	NO
63	1163382	ICU	13186	KK	53	F	PCN	08-09-2021	28-08-2021	30-09-2021	34	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	NO	CKD,DM-II,AFI,SEPSIS	YES	NO
64	1164063	ICU	12544	FS	2	M	B/C	30-08-2021	30-08-2021	05-09-2021	7	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	NO	DKA,FUNGAL SEPSIS	YES	YES
65	1164711	MEDICINE	12845	KD	30	F	CSF	03-09-2021	31-08-2021	05-09-2021	6	cryptococc	/	/	S	/	/	/	-	-	-	-	-	-	NO	AFI,FUNGAL SEPSIS,MENINGITI	YES	YES

SR.NO	MRD	BACK PAIN	PAIN ABDOME	SOB	COUGH	EXPECTORATIO	HTN	DM-II	CKD	OTHERS	DRUG HISTORY	RISK FACTORS	URINARY CATHETER	C/L	VENTILATION	STEROID	TPN	DIALYSIS	MALIGNANCY	HIV	ANTIFUNGALT/T	OUTCOME	GLACTOMANN	POS/NEG	FUNGITEL	POS/NEG
44	1137111	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	YES	YES	YES	NO	YES	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-
45	1137111	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-
46	1138827	/	/	/	/	/	YES	/	YES	DECREASED URINE OUTPUT,AL	-	-	-	-	-	-	-	-	-	-	ANIDULAFUNGIN	EXPIRED	-	-	-	-
47	1145738	NO	YES	YES	NO	NO	YES	NO	NO	WT LOSS,YELLOWISH	AMLONG	YES	YES	YES	YES	NO	YES	NO	YES	NR	FLUCONAZOLE	D/C	4.28	POS	-	-
48	1147235	NO	YES	YES	NO	NO	YES	NO	NO	NO	AMLONG	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	0.48	NEG	-	-
49	1147321	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NR	-	DISCHARG	-	-	-	-
50	1147819	NO	YES	YES	NO	NO	NO	YES	NO	NO	OHA	YES	YES	YES	YES	NO	NO	NO	NO	NR	FLUCONAZOLE	DAMA	-	-	228	POS
51	1150393	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOLE	D/C	0.07	NEG	7.8	NEG
52	1150459	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZO	DAMA	-	-	229	POS
53	1150529	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	0.12	NEG	108	POS
54	1150651	NO	NO	NO	NO	NO	YES	YES	NO	NO	AMLONGAND	YES	YES	NO	NO	NO	NO	NO	NO	NR	VORICONAZO	D/C	0.31	NEG	54.2	NEG
55	1153271	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	-	-	-	-
56	1156386	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	-	-	-	-
57	1160051	NO	YES	NO	YES	NO	YES	YES	YES	ADM. FOR AV FISTULA	OHA,AMLONG	YES	YES	YES	NO	YES	NO	YES	NO	NR	VORICONAZO	D/C	-	-	-	-
58	1160051	NO	NO	NO	NO	NO	YES	YES	YES	ADM. FOR AV FISTULA	NO	YES	YES	YES	NO	NO	NO	YES	NO	NR	VORICONAZO	D/C	4.62	POS	523	POS
59	1160461	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	0.16	NEG	523	POS
60	1161146	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZO	D/C	-	-	-	-
61	1163051	NO	YES	NO	NO	NO	NO	YES	YES	NO	OHA	YES	YES	YES	NO	YES	NO	YES	NO	NR	FLUCONAZOL	D/C	-	-	-	-
62	1163333	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZO	DAMA	5.31	POS	-	-
63	1163382	NO	YES	NO	NO	NO	NO	YES	NO	NO	OHA	YES	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZO	D/C	-	-	-	-
64	1164063	NO	NO	YES	NO	NO	NO	YES	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	0.1	NEG	-	-
65	1164711	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-

SR.NO	MRD	AREA	LAB-ID	NAME	AGE	SEX	SPECIMEN	DATE OF SPECIMEN	DOA	DOD	HOSPITAL DAYS	B/C	FLUCON	VORI	AMPHO-B	CASPO	MICA	FLUCYTO	F/C	KOH	INDIA INK	LATEX AG	F/C	OTHERS	RADIO	PRO.DX.	FEVER	VOMITING
66	1166864	ICU	12875	MK	19	F	PERITONEA	04-09-2021	03-09-2021	04-10-2021	32	C.tropicali	S	S	R	S	S	/	-	-	-	-	-	-	MILD ASCITIS	AFI,SEPSIS,ASCITIS	YES	YES
67	1171205	MEDICINE	13860	KG	48	M	B/C	18-09-2021	10-09-2021	20-09-2021	11	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	NO	AFI,FUNGAL SEPSIS	YES	NO
68	1174269	PAEDIATRICS	15759	GK	3	F	B/C	16-10-2021	10-10-2021	08-11-2021	30	C.parapsilo	R	S	S	S	S	S	-	-	-	-	-	-	NO	AML, AFI WITH SEPSIS	YES	YES
69	1176162	HDHI	15072	SS	71	F	B/C	06-10-2021	19-09-2021	09-10-2021	21	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	-	AF.POST CPR SURVIVOR,SEVER	YES	NO
70	1176162	HDHI	15095	SS	71	F	B/C	28-09-2021	19-09-2021	09-10-2021	20	C.guillierm	S	S	S	S	S	S	-	-	-	-	-	-	-	AF.POST CPR SURVIVOR,SEVER	YES	NO
71	1178858	ONCOLOGY	14586	TB	18	M	B/C	29-09-2021	23-09-2021	01-10-2021	9	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	LOWER BORDERS	AFI,FUNGAL SEPSIS AND LRTI	YES	NO
72	1182558	ICU	14674	RS	38	M	B/C	30-09-2021	29-09-2021	05-11-2021	38	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	NO	ASI,FUNGAL SEPSIS	YES	YES
73	1184390	ICU	15052	TR	71	M	B/C	05-10-2021	03-10-2021	12-10-2021	10	C.tropicali	R	S	S	S	S	/	-	-	-	-	-	-	NO	AFI,SEPSIS,LRTI	YES	NO
74	1186109	MEDICINE	15060	GS	28	M	B/C	06-10-2021	05-10-2021	08-10-2021	3	C.guillierm	S	S	S	S	S	S	-	-	-	-	-	-	NO	AFI,SEPSIS,LRTI	YES	NO
75	1186782	WRONG MRD	15469	K	2	M	B/C	06-10-2021	01-10-2021	10-10-2021	10	C.tropicali	R	S	S	S	S	/	-	-	-	-	-	-	NO	AFI	YES	YES
76	1187257	MEDICINE	15902	UD	68	F	B/C	18-10-2021	07-10-2021	18-10-2021	12	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	LOWER BORDER	SOB,SEPSIS,LRTI	YES	YES
77	1188912	MEDICINE	17736	SD	66	F	PERITONEA	16-11-2021	10-10-2021	24-11-2021	46	C.tropicali	R	R	S	S	S	/	-	-	-	-	-	-	ASCITIS	DM,AFI,SEPSIS,ASCITIS	YES	YES
78	1188912	MEDICINE	17894	SD	66	F	B/C	16-11-2021	10-10-2021	24-11-2021	46	C.tropicali	R	R	S	S	S	/	-	-	-	-	-	-	ASCITIS	DM,AFI,SEPSIS,ASCITIS	YES	YES
79	1189611	HDHI	15450	MS	30	F	PERIPHERA	11-10-2021	11-10-2021	13-10-2021	3	C.albicans	S	R	S	S	S	S	-	-	-	-	-	-	CKD,RENAL	SEPSIS,CKD,INFECTIVE	YES	NO
80	1189619	MEDICINE	15536	MS	27	M	B/C	13-10-2021	11-10-2021	13-10-2021	3	C.cferrii	/	R	R	/	/	/	-	-	-	-	-	-	LOWER BORDER	AFI WITH LRTI AND SEPSIS	YES	NO
81	1191362	SURGERY	16733	JS	62	M	PCN	29-10-2021	14-10-2021	30-11-2021	48	C.guillierm	S	S	S	S	S	S	-	-	-	-	-	-	MILD ASCITES	AFI WITH SEPSIS WITH ASCITES	YES	YES
82	1192349	ICU	15808	B	67	M	B/C	16-10-2021	16-10-2021	26-10-2021	11	C.cferrii	/	S	S	/	/	/	-	-	-	-	-	-	LOWER LUNGS	COPD,DM-II,AFI,FUNGAL	YES	YES
83	1192603	ICU	16395	KG	83	F	PLEURAL	24-10-2021	18-10-2021	15-11-2021	29	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	PULMONARY TB	DM-II,POST CABG,EXT.PULM	YES	YES
84	1192603	ICU	16730	KG	83	F	PCD DRAI	29-10-2021	18-10-2021	15-11-2021	29	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	PULMONARY TB	DM-II,POST CABG,EXT.PULM	YES	NO
85	1195673		19867	JK	14	F	B/C	20-12-2021	20-12-2021	29-12-2021	10	C.albicans	S	S	S	S	S	S	-	-	-	-	-	-	-	-	-	-
86	1196258	SURGERY	16417	PP	34	M	PERITONEA	25-10-2021	23-10-2021	02-11-2021	11	C.guillierm	S	S	S	S	S	S	-	-	-	-	-	-	NO	AFI SEPSIS	YES	NO
87	1201460	ISOLATION	17007	AS	53	M	B/C	02-11-2021	02-11-2021	11-11-2021	10	C.tropicali	S	S	S	-	-	-	-	-	-	-	-	-	NO	AFI WITH SEPSIS	YES	YES
88	1203129	PAEDIATRICS	17580	CR	1	M	B/C	11-11-2021	06-11-2021	26-11-2021	21	C.albicans	S	S	S	S	S	S	-	-	-	-	-	-	NO	AFI,SEPSIS	YES	YES

SR.NO	MRD	BACK PAIN	PAIN ABDOME	SOB	COUGH	EXPECTORATIO	HTN	DM-II	CKD	OTHERS	DRUG HISTORY	RISK FACTORS	URINARY CATHETER	C/L	VENTILATION	STEROID	TPN	DIALYSIS	MALIGNANCY	HIV	ANTIFUNGAL T/T	OUTCOME	GLACTOMANN	POS/NEG	FUNGITEL	POS/NEG
66	1166864	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	EXPIRED	0.51	POS	84.1	POS
67	1171205	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZO	D/C	0.51	POS	84.1	POS
68	1174269	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	NO	NO	NO	NO	YES	NR	FLUCONAZOL	D/C	1.73	POS	-	-
69	1176162	NO	NO	YES	NO	NO	NO	NO	NO	NO	CARDIOPROTECTO	YES	YES	YES	YES	NO	NO	NO	NO	NR	VORICONAZO	DAMA	-	-	-	-
70	1176162	NO	NO	YES	YES	YES	NO	NO	NO	NO	CARDIOPROTECTO	YES	YES	YES	YES	NO	NO	NO	NO	NR	VORICONAZO	DAMA	-	-	-	-
71	1178858	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	NO	YES	NO	NO	NO	NR	VORICONAZO	D/C	-	-	-	-
72	1182558	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	0.29	NEG	183	POS
73	1184390	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	NO	YES	NO	NO	NO	NR	VORICONAZO	D/C	-	-	-	-
74	1186109	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	-	-	-	-
75	1186782	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	0.39	NEG	523	POS
76	1187257	NO	NO	YES	YES	YES	YES	NO	NO	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	EXPIRED	-	-	-	-
77	1188912	YES	YES	NO	NO	NO	NO	YES	NO	NO	OHA	YES	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZO	DAMA	-	-	-	-
78	1188912	YES	YES	NO	NO	NO	NO	YES	NO	NO	OHA	YES	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZO	DAMA	-	-	-	-
79	1189611	YES	YES	YES	YES	YES	YES	NO	YES	POST LSCS	NO	YES	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	-	-	-	-
80	1189619	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-
81	1191362	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-
82	1192349	YES	NO	NO	YES	YES	NO	YES	NO	NO	BRONCHODILATO	YES	YES	YES	NO	YES	NO	NO	NO	NR	VORICONAZO	DAMA	-	-	-	-
83	1192603	YES	YES	YES	YES	YES	YES	YES	YES	NO	ON ATT	YES	YES	YES	YES	NO	NO	NO	NO	NR	VORICONAZO	EXPIRED	-	-	-	-
84	1192603	NO	NO	NO	NO	NO	NO	NO	NO	NO	ON ATT	YES	YES	YES	YES	NO	NO	NO	NO	NR	VORICONAZO	EXPIRED	-	-	-	-
85	1195673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FLUCONAZOL	DAMA	-	-	-	-
86	1196258	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZO	DAMA	-	-	-	-
87	1201460	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	DAMA	-	-	-	-
88	1203129	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NR	FLUCPNAZOL	DAMA	-	-	-	-

SR.NO	MRD	AREA	LAB-ID	NAME	AGE	SEX	SPECIMEN	DATE OF SPECIMEN	DOA	DOD	HOSPITAL DAYS	B/C	FLUCON	VORI	AMPHO-B	CASPO	MICA	FLUCYTO	F/C	KOH	INDIA INK	LATEX AG	F/C	OTHERS	RADIO	PRO.DX.	FEVER	VOMITING
89	1203366	MEDICINE	17366	HK	79	F	DRAIN	08-11-2021	07-11-2021	09-11-2021	3	C.tropicali	R	R	R	S	S	/	-	-	-	-	-	-	LOWER BORDER	POST COVID WITH AFI SEPSIS	YES	YES
90	1205418	SURGERY	17723	GS	31	M	PERITONEA	13-11-2021	10-11-2021	21-11-2021	12	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	MOD ASCITIS	AFI,SEPSIS,ASCITIS	YES	YES
91	1206753	MEDICINE	3217/2022	HS	62	M	PCN	05-03-2022	02-03-2022	08-03-2022	7	C.tropicali	S	S	S	S	R	/	NO GRO	BYLCPH	-	-	-	-	HYDRONEPHRITIS,	PYELONEPHRITIS, UTI,SEPSIS,MR,MI	YES	NO
92	1208212	HDHI	20170	LS	23	M	PCN	25-12-2021	21-12-2021	12-01-2022	21	C.guilliermi	S	S	S	S	S	S	-	-	-	-	-	-	NECROTIZING	HTN,CHOLELITHIASIS,PANCREATITIS,	/	YES
93	1210276	PAEDIATRICS	18112	S	29	M	B/C	19-11-2021	19-11-2021	24-11-2021	6	C.parapsilo	S	S	S	S	S	S	-	-	-	-	-	-	LOWER BORDER	AFI,SEPSIS,LRTI	YES	YES
94	1213130	SURGERY	18690	MK	68	F	BILE	29-11-2021	24-11-2021	11-12-2021	18	C.guilliermi	S	S	R	R	S	S	-	-	-	-	-	-	P/CHOLECYSTECTOM	DM,POST CHOLECYSYTECTO	YES	YES
95	1213305	SURGERY	18741	BS	52	M	CENTRAL	30-11-2021	24-11-2021	02-12-2021	9	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	POST COVID,LO	HERNIA REPAIR,RSA,AFI,S	YES	YES
96	1215125	MEDICINE	18629	DK	57	F	B/C	28-11-2021	28-11-2021	29-11-2021	2	C.tropicali	R	S	S	R	S	/	-	-	-	-	-	-	NO	AFI,FUNGAL SEPSIS	YES	YES
97	1217026	MEDICINE	18825	IS	22	M	B/C	01-12-2021	01-12-2021	05-12-2021	5	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	-	-	-	-
98	1221461	MEDICINE	19645	CL	57	F	RIGHT	15-12-2021	10-12-2021	02-01-2022	24	C.cferrii	/	S	S	/	/	/	-	-	-	-	-	-	-	POST RSA, SEIZURE	/	/
99	1222541	PAEDIATRICS	1364/2022	AK	2Y	F	B/C	29-01-2022	27-01-2022	10-02-2022	15	C.albicans	S	S	S	S	S	S	-	-	-	-	-	-	DIFFUSE CEREBRAL	B-CELL ALL WITH DOWN'S	-	-
100	1222541	PEDIATRIC	3066/2022	AK	2Y	F	B/C	02-03-2022	02-03-2022	03-04-2022	33	C.pelliculos	S	S	S	/	/	/	NO GRO	NFES	-	-	-	-	DOWN SYNDROM	B-CELL ALL,SEIZURE,DOW	-	-
101	1224091	MEDICINE	3468/2022	SS	27	M	B/C	10-03-2022	23-01-2022	23-03-2022	60	C.auris	/	/	/	/	/	/	NO GRO	NFES	-	-	-	-	PARARENAL	LEFT RENAL ABSCESS,PYELONE	YES	YES
102	1226390	MEDICINE	19824	VK	57	F	B/C	19-12-2021	19-12-2021	25-12-2021	7	C.albicans	S	S	S	S	S	S	-	-	-	-	-	-	PYELONEPHRITIS	DM-II,HTN,CKD,RIGHT	/	/
103	1227216	PAEDIATRICS	2411/2022	PS	1Y	M	B/C	18-02-2022	15-02-2022	04-03-2022	18	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	TOXIC LEUKOENC	FOCAL SEIZURES,PANCYT	/	YES
104	1228655	NURSERY	762/2022	KG	24/D	M	B/C	16-01-2022	24-12-2021	16-01-2022	24	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	-	ACYANOTIC CONGENITAL	-	-
105	1230257	MEDICINE	20415	JK	62	F	BILE	29-12-2021	27-12-2021	26-01-2022	31	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	PANCREATITIS,	PANCREATITIS, ASCITES, PLEURAL	-	-
106	1231311	PAEDIATRICS	1431/2022	S	1M	M	B/C	30-01-2022	29-12-2021	06-02-2022	40	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	-	-	-	-
107	1234482	NURSERY	266/2022	GK	16/D	M	B/C	06-01-2022	06-01-2021	05-02-2022	29	C.guilliermi	S	S	S	S	S	S	-	-	-	-	-	-	SEPSIS	-	-	-
108	1236673	PAEDIATRICS	467/2022	Y	1M	M	B/C	10-01-2022	10-01-2022	24-01-2022	15	C.tropicali	S	S	S	M	R	/	-	-	-	-	-	-	B/L PLEURAL	DUODENAL ATRESIA,PLEURAL	-	-
109	1236673	PAEDIATRICS	1026/2022	Y	1M	M	B/C	21-01-2022	10-01-2022	24-01-2022	15	C.pelliculos	S	S	S	/	/	/	-	-	-	-	-	-	B/L PLEURAL	DUODENAL ATRESIA,PLEURAL	-	-
110	1238755	MEDICINE	944/2022	SR	38	F	PCN	19-01-2022	13-01-2021	24-01-2021	12	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	B/L NEPHROLI	B/L NEPHROLITHIASIS,	/	/
111	1239222	ICU	3383/2022	HP	35	M	DRAIN	08-03-2022	02-03-2022	11-03-2022	10	C.tropicali	S	S	S	S	S	/	NO GRO	NFES	-	-	-	-	LEFT PLEURAL	PAIN ABDOMEN,ACUTE	YES	NO

SR.NO	MRD	BACK PAIN	PAIN ABDOME	SOB	COUGH	EXPECTORATIO	HTN	DM-II	CKD	OTHERS	DRUG HISTORY	RISK FACTORS	URINARY CATHETER	C/L	VENTILATION	STEROID	TPN	DIALYSIS	MALIGNANCY	HIV	ANTIFUNGAL T/T	OUTCOME	GLACTOMANN	POS/NEG	FUNGITEL	POS/NEG
89	1203366	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-
90	1205418	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	VORICONAZO	DAMA	-	-	-	-
91	1206753	NO	YES	NO	NO	NO	NO	YES	NO	-	AMLONG,OHA	-	-	-	-	-	-	-	-	-	AMPHOTERE	D/C	-	-	-	-
92	1208212	/	/	/	/	/	YES	/	/	-	-	-	-	-	-	-	-	-	-	-	FLUCONAZOL	D/C	-	-	-	-
93	1210276	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	NO	YES	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-
94	1213130	NO	NO	NO	NO	NO	NO	YES	NO	NO	OHA	YES	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-
95	1213305	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	YES	YES	YES	YES	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-
96	1215125	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NR	FLUCONAZOL	D/C	-	-	-	-
97	1217026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA	-	-	-	-
98	1221461	/	/	/	/	/	/	/	/	GENERALIZED TONIC	-	-	-	-	-	-	-	-	-	-	VORICONZOL	EXPIRED	-	-	-	-
99	1222541	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	YES	-	-	D/C	-	-	-	-
100	1222541	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D/C	-	-	-	-
101	1224091	YES	NO	NO	NO	NO	NO	NO	NO	-	CHRONIC ALCOHOL	OPIOD ADDICT	YES	NO	NO	NO	NO	NO	NO	NO	ISAVUCONAZO	DISCHARG	-	-	-	-
102	1226390	/	/	YES	/	/	YES	YES	YES	DEC.URINE OUTPUT	-	-	-	-	-	-	-	-	-	-	FLUCONAZOL	D/C	-	-	-	-
103	1227216	/	/	YES	/	/	/	/	/	-	-	-	-	-	-	-	-	-	YES	-	FLUCONAZOL	DAMA	-	-	-	-
104	1228655	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA	0.38	NEG	-	-
105	1230257	-	YES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA	-	-	502	POS
106	1231311	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D/C	0.24	NEG	484	POS
107	1234482	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA	0.24	NEG	484	POS
108	1236673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D/C	0.71	POS	523	POS
109	1236673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D/C	-	-	-	-
110	1238755	/	YES	/	/	/	/	/	/	/	/	HYPOTHYROIDISM	-	-	-	YES	-	-	-	-	/	DAMA	0.2	NEG	146	POS
111	1239222	NO	YES	NO	NO	NO	NO	NO	NO	-	-	-	-	-	-	-	-	-	-	-	-	DAMA	0.27	NEG	523	POS

SR.NO	MRD	AREA	LAB-ID	NAME	AGE	SEX	SPECIMEN	DATE OF SPECIMEN	DOA	DOD	HOSPITAL DAYS	B/C	FLUCON	VORI	AMPHO-B	CASPO	MICA	FLUCYTO	F/C	KOH	INDIA INK	LATEX AG	F/C	OTHERS	RADIO	PRO.DX.	FEVER	VOMITING
112	1241670	MEDICINE	955/2022	SS	65	M	DRAIN	20-01-2022	19-01-2022	22-02-2022	35	C.tropicali	S	S	S	R	R	/	-	-	-	-	-	-	ESOPHAGO-PLEURO-	ESOPHAGO-PLEURO-	/	YES
113	1243123	SURGERY	1721/2022	P	3Y	M	B/C	05-02-2022	22-01-2022	14-02-2022	24	C.albicans	S	S	S	S	S	S	-	-	-	-	-	-	/	65% SCALD BURN	/	/
114	1244675	MEDICINE	1727/2022	ASG	69	M	PCD DRAI	05-02-2022	27-01-2022	23-02-2022	28	C.guilliermi	S	M	S	S	S	S	-	-	-	-	-	-	PANCREATITIS WITH	CHOLELIOTHIASIS, PANCREATITIS,	/	YES
115	1244675	MEDICINE	2311/2022	ASG	69	M	PLEURAL	16-02-2022	27-01-2022	23-02-2022	28	C.tropicali	S	R	S	S	S	/	-	-	-	-	-	-	PANCREATITIS WITH	CHOLELIOTHIASIS, PANCREATITIS,	/	YES
116	1246027	ICU	2383/2022	J	60	M	ASCITIC	17-02-2022	29-01-2022	26-02-2022	29	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	PANCTRATIC	PANCTRATIC MALIGNANCY	/	/
117	1246186	MEDICINE	1422/2022	R	45	F	B/C	30-01-2022	30-01-2022	24-02-2022	26	C.tropicali	S	S	S	S	R	/	-	-	-	-	-	-	HEPATOMEGALY	SEPSIS,HTN,OLD CVA-ICH POST	YES	/
118	1247938	MEDICINE	1693/2022	PS	58	M	B/C	04-02-2022	02-02-2022	17-02-2022	16	C.parapsilo	S	S	S	S	S	S	-	-	-	-	-	-	-	HTN,CKD,PYOGENIC	YES	/
119	1247944	MEDICINE	1590/2022	JKM	72	F	B/C	02-02-2022	02-02-2022	26-02-2022	25	C.albicans	S	S	S	S	S	S	-	-	-	-	-	-	CHOLELITHIASIS,MUL	NEUROENDOCRINE	/	/
120	1248404	MEDICINE	1681/2022	SM	80	F	B/C	04-02-2022	04-02-2022	04-02-3022	1	C.albicans	S	S	R	S	S	S	-	-	-	-	-	-	-	-	-	-
121	1248789	ONCOLOGY	3533/2022	GS	41	F	B/C	11-03-2022	12-02-2022	12-03-2022	29	C.albicans	S	S	S	S	S	S	-	NFES	-	-	-	-	K/C/O CA STOMACH	K/C/O CA STOMACH,	YES	NO
122	1248900	HDHI	2217/2022	DS	64	M	PERIPHERA	14-02-2022	04-02-2022	19-02-2022	16	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	MILD TO MOD.	HTN,DILATED CARDIOMYOPATH	/	/
123	1250352	MEDICINE	2728/2022	LS	20	F	B/C	24-02-2022	08-02-2022	26-02-2022	19	C.parapsilo	S	S	S	S	S	S	NOT DON	NFES	-	-	-	-	PULMONARY	PULMONARY TUBERCULOSIS	YES	NO
124	1250974	ISOLATION	2344/2022	SM	56	M	PLEURAL	16-02-2022	12-02-2022	24-02-2022	13	C.tropicali	R	S	S	S	S	/	-	-	-	-	-	-	HYDROPNEUMOTHO	DM-II,HTN,LEFT HYDROPNEUMOT	YES	/
125	1251403	MEDICINE	3345/2022	KK	63	F	B/C	08-03-2022	10-02-2022	11-03-2022	30	C.tropicali	S	S	S	S	R	/	NO GRO	NOT DON	-	-	-	-	CHOLELITHIASIS,PLEU	OLD CVA,UPPER GI AND LOWER GI	YES	NO
126	1253238	MEDICINE	2427/2022	AP	27	M	ASCITIC	18-02-2022	13-12-2022	22-02-2022	68	C.tropicali	S	S	S	S	S	/	NOT DON	NOT DON	-	-	-	-	ACUTE NECROTISI	-	NO	NO
127	1253294	SURGERY	2330/2022	SS	65	M	B/C	16-02-2022	13-02-2022	20-02-2022	8	C.albicans	S	S	S	S	S	S	-	-	-	-	-	-	B/L PLEURAL	RSA WITH MULTIPLE RIBS	-	-
128	1254946	MEDICINE	2418/2022	DS	65	M	B/C	18-02-2022	16-02-2022	05-03-2022	18	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	-	DM-II, HTN,CAD,CVA,AC	YES	/
129	1255099	MEDICINE	2326/2022	SS	38	M	B/C	16-02-2022	16-02-2022	24-02-2022	9	C.tropicali	S	S	S	S	S	/	-	-	-	-	-	-	PANCREATITIS ,	ACUTE PANCREATITIS	-	-
130	1256809	ICU	2586/2022	GS	75	M	PERIPHERA	22-02-2022	20-02-2022	24-02-2022	5	C.utilis	S	S	S	/	/	/	NOT DON	NOT DON	-	-	-	-	-	-	-	-
131	1256840	ICU	2675/2022	SS	49	M	B/C	23-02-2022	20-02-2022	15-04-2022	55	C.tropicali	S	S	S	S	S	/	NOT DON	NOT DON	-	-	-	-	B/L NEPHROLI	B/L NEPHROLITHIASIS,	-	-
132	1259788	ICU	2790/2022	RR	60	F	B/C	25-02-2022	25-02-2022	03-03-2022	7	C.auris	/	/	/	/	/	/	NOT DON	NFES	-	-	-	-	B/L LUNGS GROUND	HTN,DM,RA,FATTY LIVER GRADE-	-	-

SR.NO	MRD	BACK PAIN	PAIN ABDOME	SOB	COUGH	EXPECTORATIO	HTN	DM-II	CKD	OTHERS	DRUG HISTORY	RISK FACTORS	URINARY CATHETER	C/L	VENTILATION	STEROID	TPN	DIALYSIS	MALIGNANCY	HIV	ANTIFUNGAL T/T	OUTCOME	GLACTOMANN	POS/NEG	FUNGITEL	POS/NEG
112	1241670	/	YES	YES	YES	YES	/	YES	/	/	-	CHRONIC ALCOHOL	-	-	-	-	-	-	-	-	FLUCONAZOL	EXPIRED	-	-	-	-
113	1243123	/	/	/	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	VORICONAZO	DAMA	0.63	POS	523	POS
114	1244675	/	YES	/	/	/	YES	/	/	-	-	-	-	-	-	-	-	-	-	-	-	DAMA	-	-	-	-
115	1244675	/	YES	/	/	/	YES	/	/	-	-	-	-	-	-	-	-	-	-	-	-	DAMA	-	-	-	-
116	1246027	YES	YES	/	/	/	/	/	/	ALTERED SENSORIU	-	-	-	-	-	-	-	-	-	-	VOROCONAZO	DISCHARG	-	-	123	POS
117	1246186	/	/	/	/	/	YES	/	/	/	/	TRACHEOSTOMY	-	-	-	-	-	-	-	-	-	DISCHARG	-	-	-	-
118	1247938	/	/	YES	YES	/	YES	/	/	DECREASED URINE	ELTROXIN	-	-	-	-	-	-	-	-	-	FLUCONAZOL	DISCHARG	-	-	-	-
119	1247944	/	/	/	/	/	YES	/	/	DROWSY SENSORIU	/	-	-	-	-	-	-	-	-	/	/	DISCHARG	-	-	-	-
120	1248404	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARG	-	-	-	-
121	1248789	NO	YES	YES	YES	YES	YES	NO	NO	NO	CHEMOTHERAPY	-	YES	NO	NO	NO	NO	NO	YES	NO	ISAVUCONAZO	DISCHARG	0.33	NEG	205	POS
122	1248900	/	/	YES	/	/	YES	/	YES	-	-	-	-	-	-	-	-	-	-	-	ANIDULAFUN	DISCHARG	-	-	-	-
123	1250352	NO	NO	YES	YES	YES	NO	NO	NO	-	-	-	YES	NO	NO	NO	NO	NO	NO	NO	ISAVUCONAZO	DAMA	-	-	-	-
124	1250974	/	/	/	YES	/	YES	YES	/	PULMONARY KOCH	ON ATT	TB	YES	NO	YES	NO	-	-	-	-	/	DISCHARG	0.33	NEG	276	POS
125	1251403	NO	YES	YES	YES	YES	NO	NO	NO	SEIZURES	-	OLD CVA	YES	YES	YES	YES	NO	NO	NO	NO	AMPHOTERE	DISCHARG	-	-	-	-
126	1253238	NO	YES	YES	NO	NO	NO	NO	NO	-	-	-	YES	NO	YES	NO	NO	NO	NO	NO	NO	DAMA	-	-	-	-
127	1253294	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FLUCONAZOL	DISCHARG	-	-	-	-
128	1254946	/	/	/	/	/	YES	YES	YES	LOOSE STOOLS,	/	-	-	-	-	-	-	-	-	-	FLUCONAZOL	DAMA	-	-	-	-
129	1255099	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	VOROCONAZO	DAMA	-	-	-	-
130	1256809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DISCHARG	-	-	-	-
131	1256840	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA	-	-	-	-
132	1259788	-	-	-	-	-	YES	YES	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMA	-	-	-	-

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(33)

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Date 25/11/22

The Principal,
DMC, Ludhiana.

Subject: Approval of Plan of Thesis.

This is to inform you that the Faculty of Medical Sciences in its meeting held on 29.10.2021 has approved the plan of thesis of **Monica,** a student of your college for **MD Microbiology** along with the names of Supervisor/Co-Supervisor as under:-

Topic Plan of Thesis
Clinicomycological correlation and antifungal susceptibility pattern of fungal isolates in a tertiary care hospital.

Supervisor
Dr. Veenu Gupta
Prof. & Head,
Dept. of Microbiology,
DMCH, Ludhiana.

Co-Supervisor

Dr. Rajesh Mahajan
Prof.,
Dept. of Medicine,
DMCH, Ludhiana.

Dr. Jyoti Chaudhary
Assoc. Prof.,
Dept. of Microbiology,
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The student has to submit the four copies of thesis (along with PDF format) , to the Controller of Examinations, BFUHS, Faridkot, at least six months before the commencement of theory examination, if he/she is otherwise eligible to take the examination. He/She must directed to attach a photocopy of this letter with the forwarding letter while submitting thesis to the University along with the letter of approval of University for change of supervisor/Co-Supervisor, change of topic,(if any).

Dr. S P Singh MS(Oph)
Controller of Examinations

Note :

(i) If any discrepancy found regarding topic of thesis or Supervisor/ Co-Supervisor, inform undersigned within one month after issue of this letter.

(ii) The student may submit the thesis as per the schedule already conveyed i.e. for May/June examination 30th Nov of the preceding the year of examination and for Nov/Dec examinations 31st May of the year of examination.

CLINICOMYCOLOGICAL CORRELATION AND ANTIFUNGAL SUSCEPTIBILITY PATTERN OF FUNGAL ISOLATES IN A TERTIARY CARE HOSPITAL

THESIS PROPOSAL

FOR APPROVAL OF SUBJECT OF THESIS TO BE SUBMITTED IN

PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MD

In

MICROBIOLOGY

OF THE

BABA FARID UNIVERSITY OF HEALTH SCIENCES

FARIDKOT

MARCH, 2021

DR MONICA

DEPARTMENT OF MICROBIOLOGY
DAYANAND MEDICAL COLLEGE AND HOSPITAL
LUDHIANA

ABSTRACT OF PLAN OF THESIS

Title	CLINICOMYCOLOGICAL CORRELATION AND ANTIFUNGAL SUSCEPTIBILITY PATTERN OF FUNGAL ISOLATES IN A TERTIARY CARE HOSPITAL
For the degree of	MD (Microbiology)
Name of the candidate	Dr. Monica
Supervisor	Dr. Veenu Gupta, Professor & Head, Department of Microbiology, DMCH, Ludhiana
Co-supervisor	Dr. Rajesh Mahajan, Professor, Department of Medicine, DMCH, Ludhiana Dr. Jyoti Chaudhary, Associate Professor, Department of Microbiology, DMCH, Ludhiana
Institution	Dayanand Medical College and Hospital, Ludhiana
University	Baba Farid University of Health Sciences, Faridkot

INTRODUCTION- The fungal infections are increasing at high rate especially in immunocompromised patients. An early suspicion of the fungal infection with institution of appropriate antifungal therapy is mandatory for the positive outcome and to prevent development of invasive fungal infection. This prospective study will be carried out in the department of Microbiology in admitted patients with positive culture(yeasts and molds).

AIMS AND OBJECTIVES- 1. To Characterize Fungal Isolates.

2. To Study Clinico-Mycological Correlation of Fungal Infections In Admitted Patients.

MATERIAL AND METHODS- In this prospective study the data will be entered in a pre-structured proforma. Samples obtained for fungus culture from admitted patients will be processed in the department. Fungal isolates will be characterised and antifungal susceptibility will be done as per the protocol.

CLINICAL SIGNIFICANCE- Antifungal resistance is emerging as major cause of morbidity and mortality. Antifungal susceptibility will offer the early appropriate treatment and better clinical outcome of patient.

KEY WORDS- Fungal infections, Fungal Culture, Antifungal Susceptibility

(Signature) Candidate	(Signature) Co-supervisor	(Signature) Co-supervisor	(Signature) Supervisor	(Signature) Principal

CERTIFICATE OF FACILITIES AVAILABLE

This is to certify that the facilities for work on the subject of thesis titled **"CLINICOMYCOLOGICAL CORRELATION AND ANTIFUNGAL SUSCEPTIBILITY PATTERN OF FUNGAL ISOLATES IN A TERTIARY CARE HOSPITAL"** exist in the Department of MICROBIOLOGY, DMC&H, Ludhiana and will be provided to the candidate. We will see that the data being included in the thesis is genuine and is collected by the candidate herself under our supervision and guidance.

Supervisor

Dr. Veenu Gupta
Professor & Head
Department of Microbiology
DMCH, Ludhiana

Co-Supervisor(s)

Dr. Rajesh Mahajan
Professor
Department of Medicine
DMCH, Ludhiana

Dr. Jyoti Chaudhary
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Head of the Department

Dr. Veenu Gupta
Professor & Head
Department of Microbiology
DMCH, Ludhiana

Place : Ludhiana

Date : _____

APPROVAL PROFORMA
BY
RESEARCH & ETHICAL COMMITTEE
DAYANAND MEDICAL COLLEGE & HOSPITAL, LUDHIANA

Name of candidate	Dr. Monica
Department	Microbiology
Topic of Thesis	CLINICOMYCOLOGICAL CORRELATION AND ANTIFUNGAL SUSCEPTIBILITY PATTERN OF FUNGAL ISOLATES IN A TERTIARY CARE HOSPITAL
Likely date of appearing in PG examination	May 2023
Date of enrollment	25th July 2020
Name of Head of Department	Dr. Veenu Gupta
1) Supervisor **2) Co-Supervisor**	Dr. Veenu Gupta Dr. Rajesh Mahajan Dr. Jyoti Chaudhary
Signature of Members of Research Committee with Stamp	**Signature of Members of Ethics Committee with Stamp**
Dr. Harpreet Kaur (Professor & Head, Pathology)	Mr. R K Sharma (Legal Expert)
Dr. Jaspal Singh (Professor & Head, Surgery)	Dr. Ramit Mahajan (Associate Professor, Gastroenterology)
Dr. Dinesh Gupta (Professor & Head, Medicine)	Dr. Anu Sharma (Professor, Anatomy)
Dr. Sandeep Kaushal (Dean Academics & Professor & Head, Pharmacology)	Dr. Sandeep Kaushal (Dean Academics & Professor & Head, Pharmacology)
Dr. Gurpreet S Wander (Vice Principal)	Dr. Gurpreet S Wander (Vice Principal & Professor & Head, Cardiology)
	Dr. Gagandeep Singh (Secretary, Ethics Committee Professor & Head, Neurology)

Approved: Yes / No

Dr. Sandeep Puri
Chairperson
Research Committee

Approved: Yes / ~~No~~

Prof. Arvind Malhotra
Chairperson
Ethics Committee

BABA FARID UNIVERSITY OF HEALTH SCIENCES, FARIDKOT

PROFORMA FOR REGISTRATION OF SUBJECT FOR DISSERTATION

1	NAME OF THE CANDIDATE AND ADDRESS	DR. MONICA 331, ADARSH NAGAR, OPPOSITE NIRANKARI BHAWAN, SATNAMPURA, PHAGWARA,144402
2	NAME OF THE INSTITUTE	DAYANAND MEDICAL COLLEGE AND HOSPITAL,LUDHIANA
3	COURSE OF STUDY AND SUBJECT	MD MICROBIOLOGY
4	DATE OF ADMISSION OF COURSE	25-JULY-2020
5	TITLE OF THE TOPIC	Clinicomycological correlation and Antifungal susceptibility pattern of fungal isolates in a Tertiary Care Hospital .

6. BRIEF RESUME OF THE INTENDED WORK

6.1 NEED FOR STUDY

Fungal infections have recently emerged as a world-wide healthcare problem, presenting the enormous challenge to the healthcare professionals. Fungal infections are a major cause of morbidity and mortality in immune compromised individuals and *Candida* are among the most common pathogens in these patients.

The rising prevalence of fungal infections is likely related to several host factors, including immunocompromised individuals with malignancies, solid organ transplants, HIV and inflammatory conditions treated with immunosuppressants. Moreover, prolonged use of broad spectrum antibiotics in chronic patients may stimulate the growth and virulence of fungal infections by destruction of bacterial flora. An early suspicion of the fungal infection with institution of appropriate antifungal therapy is mandatory for the positive outcome and to prevent development of invasive fungal infection. However the available therapeutic options are limited , particular for the pathogens that are resistant to >1 class of antifungals.

Over past two decades, Candidaemia is frequently a life threatening complication in patients. The principal risk factors include antibiotic therapy, urinary catheterization, surgical procedures, female sex and extended hospitalization. Moreover, multiple site colonization with Candida species is also being commonly recognized as a major risk factor for invasive fungal infections in critically ill patients. The most common fungi involved in invasive disease in humans are opportunistic yeasts like Candida albicans or filamentous fungi like Aspergillus spp. Fungi such as Candida (except albicans), Fusarium, Trichosporon and Malassezia spp., which were previously considered to be non-pathogenic for humans or were only causing human diseases sporadically are now emerging as leading cause of fungal infections. Globally, Fungi of genus Aspergillus has come to cause more serious clinical pictures . Aspergillus can cause a variety of clinical manifestations depending on the immune status of the host. For example, allergic bronchopulmonary aspergillosis (ABPA),

aspergilloma which is mainly observed in patients with chronic cavitary lung disease. Other forms of aspergillosis include chronic necrotizing pulmonary aspergillosis, which is seen in immunocompromised patients and those individuals with chronic lung diseases, and invasive pulmonary aspergillosis (IPA), which is the most serious lung infection due to Aspergillus spp. and typically occurs only in severely immunocompromised patients. Aspergillus be identified in the direct specimens microscopically on detecting the presence of hyaline, regular, slender, septate hyphae with dichotomous branching (45º).

Despite advances in preventive, diagnostic, and therapeutic interventions, invasive fungal infections cause significant morbidity and mortality in immunocompromised patients. The burden of antifungal resistance in such high-risk patients is becoming a major concern. Antifungal resistance is an important factor for opportunistic fungal infections is hospitalization of patients, especially in an intensive care unit (ICU). A better understanding of the mechanisms and clinical impact of antifungal resistance is essential to the prompt and efficient treatment of patients with invasive mycoses and to improving the outcome of such infections. Resistance is found naturally among certain fungi without prior exposure to the drug. Although recent guidelines have attempted to standardize antifungal susceptibility testing, limitations still exist as a result of the incomplete correlation between in vitro susceptibility and clinical response to treatment. Multidrug resistance can eliminate treatment options entirely, which has a devastating effect on patient outcome. With this aim the prospective study will be undertaken to know the incidence, types of fungal infections, to study the antifungal susceptibility and to correlate it with the clinical outcomes in admitted patients.

6.2 REVIEW OF LITERATURE

The incidence of fungal infections has risen substantially over the past several decades. Extensive and inappropriate use of antimicrobial agents as well as use of immuno-suppressant drugs in various diseases has contributed to the increased propensity for fungal infections[1].

Cryptococcus, Candida, Aspergillus, and *Pneumocystis* affect mainly immunocompromised individuals, however endemic dimorphic fungi such as *Histoplasma, Blastomyces, Coccidioides* and *Paracoccidioides* affect immunocompetent patients as well, and endemic areas include several regions of Latin America[2,3]

Antifungal resistance refers to the non-susceptibility of a fungus to an antifungal agent by in-vitro susceptibility testing. Antifungal resistance can be primary(intrinsic) or secondary(acquired). Primary resistance is found naturally among certain fungi without prior exposure to the drug and emphasizes the importance of identification of fungal species from clinical specimens. Examples include resistance of *Candida krusei* to fluconazole and of *Cryptococcus* neoformans to echinocandins. Secondary resistance develops among previously susceptible strains after exposure to the antifungal agent and is usually dependent on altered gene expression. The development of fluconazole resistance among *Candida albicans* and *C. neoformans* strains illustrates this type of resistance.[4,5]

Antifungal resistance in *candida* species is due to multifactorial events, involving molecular modifications often related to the mechanisms of action of the drug itself. Ability to form biofilm represents a problem in the context of the antifungal drug -resistance . Echinocandin and azole resistance is commonly reported in non-albicans candida from cases of invasive candidiasis. A rational use of antifungal drugs in clinical practice could prevent and reduce the emergence of resistant strains.

Resistance to antifungal drugs is increasing in recent years . The resistance of *C.albicans, C.tropicalis and C.glabrata* to fluconazole is increased compared to other drugs, due to indiscriminate use of fluconazole for long periods. *C.krusei* is intrinsically resistant to

fluconazole. IDSA also states that, more than 90 % of invasive candidiasis is caused by *C. albicans, C. glabrata, C. tropicalis, C. parapsilosis,* and *C. krusei*, and these have unique virulence potential, antifungal susceptibility and epidemiology[6]All these factors has led to increase in the mortality and morbidity rates in patients with fungal infections warranting rapid identification and antifungal susceptibility testing at the earliest. The incidence of Candidemia of 6.9 per 1,000 intensive care unit (ICU) patients was reported in a recent study, and 7.5% of ICU patients received antifungal therapy.[7,8]

Among yeasts, *Candida krusei* is multidrug resistant, with decreased susceptibility to Fluconazole, Amphotericin B and Flucytosine. *Candida glabrata* is less susceptible to Amphotericin B and Fluconazole[9].

Azole resistance among Candida and Aspergillus species is one of the greatest challenges to clinical success, followed by echinocandin and multidrug resistance among some Candida species, especially Candida glabrata.[9]

Fungi of the genus Aspergillus have the capacity to cause diverse clinical pictures, from simple allergic forms to invasive aspergillosis, with a mortality rate higher than 80% in invasive forms when therapeutic measures are not applied quickly.[10] Triazoles are usually the antifungals of choice for the treatment of different clinical forms of aspergillosis and in the prophylaxis of severe cases. Acquired resistance to azoles would develop in response to the sustained exposure of fungi to azolic compounds.[11,12] Globally, there has been an alarming increase of azole resistance in A. fumigatus . Widespread use of itraconazole and fluconazole is thought to have been the major driver of azole resistance. Although resistance to amphotericin B among *Candida* strains remains rare.[13]

Polyene resistance is increasingly encountered in other Aspergillus species, such as *Aspergillus flavus* and even *A. fumigatus*, which traditionally exhibits the highest susceptibility to amphotericin B.[14] Echinocandins inhibit the synthesis of β-1,3-D glucan, which is integral to the structure and function of the fungal

cell wall. Echinocandins are highly effective against *Candida* and *Aspergillus* species, The burden of echinocandin resistance is still poorly appreciated.

Antifungal susceptibility tests have become essential tools to guide the treatment of fungal diseases, to know the local and global disease epidemiology, and to identify resistance to antifungals.[15]

Out of 70 samples, Collected in a tertiary care centre in Kolkata, India, *Candida albicans* were isolated from 34 (48.57%) samples. The remaining 36 (51.43%) were non-albicans Candida (NAC). Out of 34 *C.albicans*, antifungal susceptibility was detected in 28 isolates, all of which were sensitive to fluconazole (FLC). Resistance to amphotericin B, flucytosine (5FC), voriconazole (VRC), and itraconazole (ITC) was observed in 44.12%, 52.94%, 8.82% and 17.65% of the cases, respectively. Out of 36 isolates, resistance to AMP, FLC, 5FC, VRC, and ITC was found in, 30.56%, 61.11%, 33.33%, 19.44% and 38.89% cases of non-albican Candida respectively.[16]

Among the 390 Aspergillus isolates, collected in two teaching hospitals in Taiwan and Mainland china, 76.7% (n = 299) exhibited complete susceptibility to all the tested antifungals, and 23.3% (91/390) of different Aspergillus species isolates showed resistance to one or two classes of antifungal agents with higher minimum inhibitory concentrations (MICs) of >2 mg/L. Resistance to amphotericin B was found in 91.2% (83/91) of those less susceptible isolates and most of them focused on species being resistant to Amphotericin B innately. The total rate of triazole resistance in this study was low (3.3%, 13/390), and only 3 (2.8%) A. fumigatus isolates were resistant to at least one of the triazoles with mutations of TR_{34}/L98H or TR_{46}/Y121F/T289A in CYP51A gene. The echinocandins were highly potent to the tested Aspergillus isolates.[17]

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A total of 72 isolates from individual patients were collected from the Central Microbiology Laboratory and the Mycology Laboratory, in South India over a period of 22 months (October 2014–August 2016).

Forty patients were male and 32 were female. The age of the patients ranged between 4 and 86 years. A majority of the patients were in the age group of 21–30 years (40.27%), with a male preponderance. Majority of the patients in this study group were above 20 years. The maximum number of specimens 29 (40.27%) were from the age group of 21–30 years with male predominance. Of the 72 patients in the study group, only 8 (11%) were immunocompromised and the remaining 64 (89%) being immunocompetent. Among the immunocompromised patients, 7 (9.72%) were diabetic and 1 (2.50%) was asthmatic. In the study, *Aspergillus* species were isolated from pus from the auditory canal, which was the predominant specimen (44) followed by nasal tissue (9), exudate (6), sputum (5), nasal swab (4), bronchoalveolar lavage (2), corneal scraping (2), and heel tissue 1 (1.38%) shows the distribution of the isolates from various clinical sites. *Aspergillus flavus* was found to be the most predominant and was identified in 46 (63.80%) cases of Aspergillosis. *Aspergillus niger* was the second most predominant species, isolated in 16 cases (22.20%). *Aspergillus fumigatus*, *Aspergillus terreus* and *A. tetrazonuswere* the other species identified in 5 (6.94%), 4 (5.55%) and 1 (1.38%) cases, respectively. All *Aspergillus* isolates tested in this study exhibited MIC values within the range of 0.0078–2 μg/ml except for *A. terreus* (4 μg/ml), which is known to exhibit intrinsic resistance to amphotericin B.[18]

Total of 1,416 azole-naive immunocompromised patients suspected of Invasive Aspergillosis were enrolled over a period of 4 years (2012 to 2016). There were 706/1, 416 (49.8%). The culture grew *Aspergillus* spp. in 122/1,416 (8.6%) clinically correlated cases (97 *Aspergillus flavus*, 22 *Aspergillus fumigatus*, two *Aspergillus terreus* and one *Aspergillus niger*) and were tested for their susceptibility profiles. In the study, in vitro antifungal resistance (irrespective of class of drugs) was noted in 2.3% (16/706) of Invasive aspergillosis patients, in 13.1% (16/122) of Invasive aspergillosis isolates and in 2.2% (5/229) of voriconazole-exposed Invasive aspergillosis patients (including 191 voriconazole recipients and 113 voriconazole-amphotericin B recipients).[13]

Testing of *Candida* spp. isolates revealed 84% sensitivity, 15% DDS and 1% resistance to fluconazole; 99% sensitivity and 1% resistance to ketoconazole; and 73% sensitivity, 23% DDS and 4% resistance to itraconazole. One isolate (C. albicans) was resistant to fluconazole, one (*C. tropicalis*) to ketoconazole and four (two *C. glabrata* , one *C. albicans* and one *C. tropicalis*) to itraconazole.[13]

A prospective study in a pool of confirmed HIV-positive individuals at a specialty outpatient service in Rondonópolis, Mato Grosso, Brazil. Oral swabs were collected from 197 patient, out of which total of 101 (51.3%) patients were *Candida spp* carriers. *Candida albicans* was the most prevalent species (80%). Patients aged 45 to 59 years and 60 years or older were at higher risk of oral colonization by Candida species. Resistance to fluconazole and ketoconazole, or to itraconazole, corresponded to 1% and 4%, respectively.[19]

6.3 AIMS AND OBJECTIVES OF THE STUDY-

1. To Characterize Fungal Isolates.
2. To Study Clinico-Mycological Correlation Of Fungal Infections in admitted patients.

7. MATERIALS AND METHODS

The study will be a prospective study conducted over a period of one year from March,16 2021 to March,15 2022 in the Department of Microbiology, Dayanand Medical College and Hospital, Ludhiana.

INCLUSION CRITERIA- Samples with positive culture(yeasts and molds) will be included as per the Proforma enclosed and detailed history of the selected cases will be recorded. All patients will be followed up to the treatment level to know the clinical outcome.

SAMPLE COLLECTION-

Various Samples like blood, body fluids(ascitic fluid, pleural fluid, cerebrospinal fluid(CSF),respiratory samples(sputum, Bronchoalveolar lavage (BAL), endotracheal secretions, bronchial brushings), Surgical drain fluid, pus, tissue, skin scrapings, corneal scapings ,biopsy etc will be collected.[20]

SPUTUM- Collected in wide mouth container.

ENDOTRACHEAL SECRETIONS(ET)-Ramson's suction catheter with a mucus extractor was gently introduced through the ET Tube for a distance of approximately 25-26 cm. Gentle aspiration was then performed and the catheter was with drawn from the ET. Taking all aseptic precautions.

BRONCHOALVEOLAR LAVAGE(BAL)-About 120 ml of physiological saline was infused through the bronchoscope into the airway lumen . The aspirate was then collected in a sterile, robust and leak proof container.

BLOOD- Under aseptic conditions , 5 ml of blood was withdrawn from the antecubital vein with a disposable syringe, and was inoculated directly into Bac T/Alert and BACTEC 9240 Blood culture bottles.

PUS- Pus and discharge from wounds (post-operative and others), burns, and abscesses were collected with the sterile cotton tipped swabs/syringes.

OTHERS-Catheter tips(central venous catheter tips, umbilical tips) and body fluids like cerebrospinal fluids , ascitic fluid, pleural fluid, etc were collected aseptically in a sterile container .

SAMPLE PROCESSING-The samples received in microbiology lab will be processed as under.

1. Direct examination (Fungal smear): A drop of 10-20% KOH will be put on the centre of the clean glass slide. Then the specimen will be placed in the KOH drop and mixed gently by inoculating loop. A cover slip will be placed over the specimen. The slide will be observed under high power objective.[21,22]

2. INDIA INK PREPARATION- Cerebrospinal fluid will be centrifuged, a small quantity of the sediment will be emulsified into a drop of India ink on a clean glass slide and overlaid with a coverslip. The mount will be examined under a microscope.

3.Cryptococcal antigen Test - It is a rapid immunochromatographic test for the semi-quantitative detection and titration of Cryptococcus species capsular antigens in CSF.

4. GRAM'S STAINING - Gram staining of the samples will be done if indicated.

5. Culture-

a. FUNGAL CULTURE- Various Samples except blood and body fluids will be inoculated on two sets of SDA. One tube containing SDA with antibiotics and cycloheximide, other tube containing SDA with antibiotics and without cycloheximide. SDA slants will be incubated at 25 degree celcius and 37 degree celcius, will be examined daily for growth for first week and twice a week for next period of 3 weeks.

b. BLOOD AND BODY FLUID CULTURE- Blood and body fluid culture will be done by BAC-T alert and BACTEC automated systems. The blood culture bottles will be incubated till the bottle indicate positive by the system for maximum period of 7 days. The Bac-T alert microbial detection utilizes a colorimetric sensor(colour changes from green to yellow), while the Bactec uses flourescent light to monitor the presence and production of CO2 by the micro-organisms.

PROCESSING OF THE POSITIVE BOTTLES- Smears will be prepared from the positive culture bottles and Gram staining of the smears will be done for Identification of fungus.

IDENTIFICATION-

The Growth obtained will be identified on the basis of colony morphology, rate of growth, texture, colour ,pigmentation and findings on LCB (Lactophenol Cotton Blue) mount examination. Yeast like growth will be identified on the basis of Gram Stain, Germ tube test, VITEK-2 .

LACTOPHENOL COTTON BLUE PREPARATION(LCB)- A drop of LCB will be placed on a glass slide. A piece of clear vinyl adhesive tape 6-7 cm held with forceps and introduced into the culture tube. The centre of yhe tape will be allowed to touch the colony lightly under its own weight. The tape will be transferred to the slide , placing the area with adhered mycelium on to the lactophenol blue and under microscope.

GERM TUBE TEST (GTT)- A small colony of the yeast to be tested will be suspended in a tube containing 0.5ml of the human serum. the test tube will be incubated at 37 degree celcius for 2 hours. A drop of yeast serum suspension will be placed on a slide overlaid with a coverslip and examined microscopically for the presence of germ tube.

CRITERIA FOR DIAGNOSIS OF FUNGAL INFECTIONS- Isolation of any type of fungus from various samples will be considered as Fungal infection except the fungal colonizers[13]

CRITERIA FOR DIAGNOSIS OF FUNGAL COLONIZATION-

Isolation of candida species from sputum, Endotracheal aspirate, Urine will be considered as fungal colonization.

ANTIFUNGAL SUSCEPTIBILITY -

FOR YEASTS - Antifungal susceptibility for yeasts (flucytosine, fluconazole, voriconazole, amphotericin-B, and caspofungin) will be done by VITEK-2 Technology.

The VITEK-2 yeast susceptibility test is automated identification and susceptibility test through analysis of yeast growth.

It is based on micro-dilution minimum inhibitory concentration technique. The automated growth based detection uses attenuation of light measured by and optical scanner.

FOR ASPERGILLUS ISOLATES- Antifungal susceptibility for aspergillus will be carried out with Sensititre YEASTONE susceptibility system (Amphoterecin B, ketoconazole, Echinocandins, itraconazole, fluconazole, voriconazole, posaconazole, and caspofungin) will be included.

It is a colorimetric microdilution test . Each plate is dosed with antifungal agents at appropriate dilutions and a colorimetric indicator . Results are read manually by observing the lowest antifungal concentration showing inhibition of growth(as evidenced by no colour change).

SEROLOGICAL EVALUATION

1. Galactomannan assay: Immunoenzymatic sandwich microplate assay which detects galactomannan in human serum. Uses rat EBA-2 monoclonal antibodies.

Interpretation:

NEGATIVE RESULT: <0.50

POSITIVE RESULT: ≥0.50

2. (1-3)-β-D Glucan Assay: The Fungitell kinetic assay is based upon the determination of the rate of optical density increase produced by a sample. The Fungitell test results are expressed in picogram/ml.

Interpretation:

NEGATIVE RESULT: <60 pg/mL

INDETERMINATE RESULT: to 79 pg/mL

POSITIVE RESULT: ≥ 80 pg/mL

7.1 SOURCE OF DATA

Samples obtained from the admitted patients in DMCH with positive culture(yeasts and molds) will be included, antifungal susceptibility will be done and will be correlated clinically.

7.2 **METHOD OF COLLECTION OF DATA**-

Data collected will be entered in a pre structured proforma which will include patient's details: Name, age, gender, MRD number, Lab ID No., date of admission, presenting complaints, sample, predisposing risk factors, treatment history, microbiological evaluation { fungal smear/ culture, (1-3)-β-D- Glucan, galactomannan}, chest X-ray and high

resolution computerised tomography (HRCT) (if required), treatment history and outcome.

Outcome:

Clinical spectrum and mycological findings of cases will be correlated in the study.

Statistical analysis:

The data will be recorded on the proforma enclosed and will be described in terms of range; mean ±standard deviation (± SD), frequencies (number of cases) and relative frequencies (percentages) as appropriate. All statistical calculations will be done using SPSS (Statistical Package for the Social Science) SPSS 21 version statistical program for Microsoft Window.

7**.3 DOES THE STUDY REQUIRE ANY INVESTIGATIONS OR INTERVENTIONS TO BE CONDUCTED ON PATIENTS OR OTHER HUMANS OR ANIMALS? IF SO, PLEASE DESCRIBE BRIEFLY.**

Not Applicable

7.4 HAS ETHICAL CLEARANCE BEEN OBTAINED FROM YOUR INSTITUTION IN CASE OF 7.3?

Attached Herewith

8. LIST OF REFERENCES

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PROFORMA

NAME S. NO.

AGE /SEX MRD NO.

PROVISIONAL DIAGNOSIS ADMISSION NUMBER

LOCATION DATE OF ADMISSION

HISTORY

- CHIEF COMPLAINTS

- DRUG HISTORY

- RISK FACTORS YES NO
  1. Urinary catheterization
  2. Central line insertion
  3. Respiratory ventilation
  4. Corticosteroid use
  5. Total parentral nutrition
  6. Peritoneal dialysis
  7. Underlying co-morbid conditions
  8. Diabetes Mellitus
  9. Malignancy
  10. HIV/AIDS
  11. Others
      a.
      b.
      c.

Signature of Candidate

Signature of Supervisor

ANTIFUNGAL TREATMENT

LABORATORY PARAMETERS

SPECIMEN :-

DATE :-

LAB ID NO :-

RADIOLOGICAL FINDINGS:

TESTS

A. DIRECT MICROSCOPY:

B. INDIA INK PREPARATION

C. LATEX AGGLUTINATION TEST

D. CULTURE

IDENTIFICATION

ANTIFUNGAL SUSCEPTIBILITY:

OTHER INVESTIGATIONS :-

SEROLOGICAL INV. 1-3 BETA GLUCAN ASSAY

GALACTO MANNAN

DATE OF DISCHARGE

OUTCOME

Signature of Candidate

Signature of Supervisor

INFORMED PATIENT CONSENT

Date: _____

I.....D/o, W/o, S/o.....
.....am willing to participate in the study **"CLINICOMYCOLOGICAL CORRELATION AND ANTIFUNGAL SUSCEPTIBILITY PATTERN OF FUNGAL ISOLATES IN A TERTIARY CARE HOSPITAL"** The procedure with its complications has been explained to me in local vernacular language. I have fully understood that no special tests and extra expenditure in any form, merely for the purpose of thesis is being carried out. I am free to opt out the study any time without assigning any reason.

.....
Signature of the Witness

.....
Signature of the patient

Name:

Signature of Candidate

Signature of Supervisor

मरीज अनुमति फार्म

तिथि _____

मैं _____ पत्नी/पुत्र/पुत्री _____

निवासी _____

इस शोधकार्य **"CLINICOMYCOLOGICAL CORRELATION AND ANTIFUNGAL SUSCEPTIBILITY PATTERN OF FUNGAL ISOLATES IN A TERTIARY CARE HOSPITAL"** में भाग लेने के लिए सहमत हूँ। मैं इस शोधकार्य में भाग लेने के लिए अपनी स्वेच्छा से तैयार हूँ। मैं पुष्टि करता/करती हूँ की यह स्वीकृति देने के लिए मुझे कोई आर्थिक प्रलोभन नहीं दिया गया और न ही दबाव डाला गया है। मुझे इस शोधकार्य का उद्देश्य स्पष्ट कर दिया गया है और मुझे यह विश्वास है की यह विज्ञान और मानवता के लाभ के लिए है। मुझे इस शोधकार्य में होने वाले जोखिम के बारे में समझा दिया गया है और मेरी समझ में यह जोखिम बहुत मामुली है।

मैं इस शोधकार्य में भाग लेने के सम्बन्ध में किसी भी समय अपनी अस्वीकृति व्यक्त कर सकता/सकती हूँ और मेरे अस्वीकृति व्यक्त करने का मेरे इलाज पर कोई प्रभाव नहीं पड़ेगा।

_____ _____

गवाह के हस्ताक्षर रोगी के हस्ताक्षर/अंगूठे का निशान

नाम: नाम:

_____

अन्वेषक के हस्ताक्षर

_____

विद्यार्थी के हस्ताक्षर

ਮਰੀਜ਼ ਰਜ਼ਾਮੰਦੀ ਫਾਰਮ

ਮਿਤੀ_____

ਮੈ_____ਪਤਨੀ/ਪੁੱਤਰ/ਪੁੱਤਰੀ_____

ਵਾਸੀ _____

"CLINICOMYCOLOGICAL CORRELATION AND ANTIFUNGAL SUSCEPTIBILITY PATTERN OF FUNGAL ISOLATES IN A TERTIARY CARE HOSPITAL" ਤੇ ਚਲ ਰਹੀ ਖੋਜ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਲਈ ਰਜ਼ਾਮੰਦ ਹਾਂ। ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਲਈ ਮੈ ਆਪਣੀ ਮਰਜ਼ੀ ਨਾਲ ਤਿਆਰ ਹਾਂ। ਮੈ ਇਹ ਦਸਣਾ ਚਾਹੁੰਦਾ ਹਾਂ/ ਚਾਹੁੰਦੀ ਹਾਂ ਕੇ ਇਹ ਰਜ਼ਾਮੰਦੀ ਦੇਣ ਵਾਸਤੇ ਮੈਨੂ ਕਿਸੇ ਵੀ ਤਰਾਂ ਦਾ ਲੋਭ-ਲਾਲਚ ਨਹੀ ਦਿੱਤਾ ਗਿਆ ਅਤੇ ਨਾ ਹੀ ਕੋਈ ਦਬਾ ਪਾਇਆ ਗਿਆ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਦਾ ਮਨੋਰਥ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ ਅਤੇ ਮੈਨੂ ਇਹ ਭਰੋਸਾ ਦਵਾਇਆ ਗਿਆ ਹੈ ਕੇ ਇਹ ਖੋਜ ਵਿਗਿਆਨ ਅਤੇ ਮਾਨਵਤਾ ਦੀ ਭਲਾਈ ਲਈ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਵਿਚ ਹੋਣ ਵਾਲੇ ਖਤਰੇ ਬਾਰੇ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ ਅਤੇ ਮੈਨੂ ਇਹ ਯਕੀਨ ਹੈ ਕੇ ਇਹ ਖਤਰਾ ਬਹੁਤ ਮਾਮੂਲੀ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਦਾ ਢੰਗ – ਤਰੀਕਾ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ।

ਮੈ ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਬਾਰੇ ਆਪਣੀ ਰਜ਼ਾਮੰਦੀ ਕਿਸੇ ਵੀ ਸਮੇ ਵਾਪਸ ਲੈ ਸਕਦਾ ਹਾਂ/ ਸਕਦੀ ਹਾਂ ਅਤੇ ਮੇਰੀ ਰਜ਼ਾਮੰਦੀ ਵਾਪਸ ਲੈਣ ਦਾ ਮੇਰੇ ਇਲਾਜ ਤੇ ਕੋਈ ਅਸਰ ਨਹੀ ਹੋਵੇਗਾ।

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ਗਵਾਹ ਦੇ ਹਸਤਾਖਰ ਮਰੀਜ਼ ਦੇ ਹਸਤਾਖਰ

ਮਿਤੀ_____ ਮਿਤੀ_____

ਪਤਾ _____ ਪਤਾ _____

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ਨਿਰੀਖਕ ਦੇ ਹਸਤਾਖਰ

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ਸਿਖਿਆਰਥੀ ਦੇ ਹਸਤਾਖਰ